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"शोध पत्रिका"

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Rakesh Tewari

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लेखकों द्वारा व्यक्त विचारों के लिए **सम्पादक** का उत्तरदायित्व नहीं होगा।

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प्राप्ति तिथि
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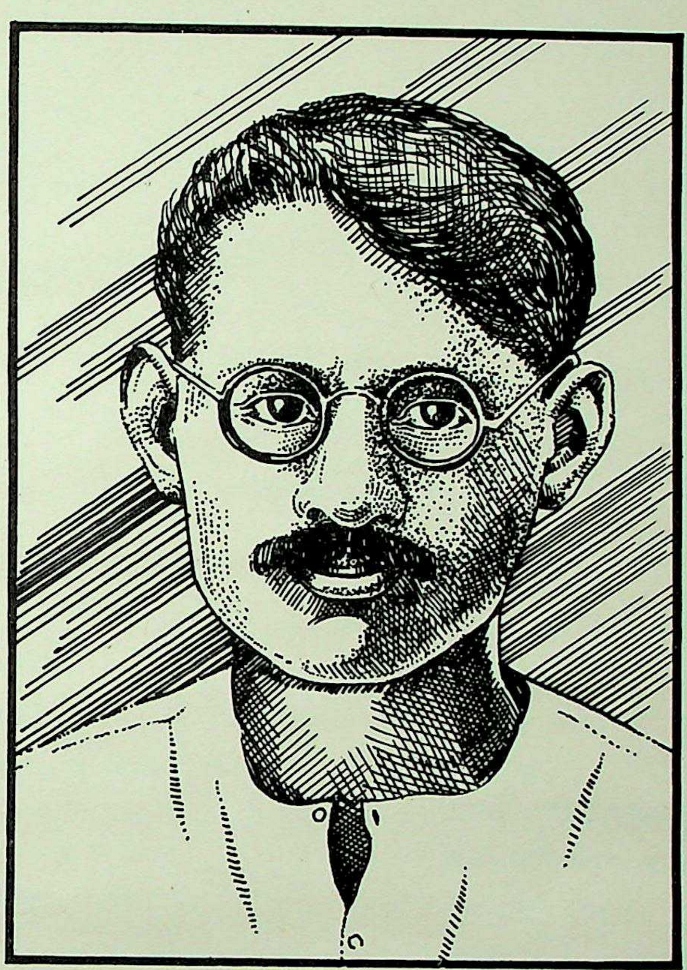

26 अक्टूबर, 1890 25 मार्च, 1931

प्राणधारा का प्रस्तुत अंक

स्वर्गीय श्री गणेश शंकर विद्यार्थी

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स्वर्गीय अमर शहीद गणेश शंकर विद्यार्थी

26 अक्टूबर, 1890 से 26 अक्टूबर, 1990 का समय उत्तर प्रदेश सरकार द्वारा अमर शहीद गणेश शंकर विद्यार्थी की जन्म शताब्दी वर्ष के रूप में मनाया जा रहा है। इस अवधि में सांस्कृतिक कार्य विभाग, उ० प्र० द्वारा विद्यार्थी जी के कार्यकलापों का श्रद्धापूर्वक स्मरण करते हुए विविध आयोजनों द्वारा उनके जीवन के सामाजिक, राजनैतिक एवं मानवता प्रेमी पक्षों को उजागर करने का प्रयास किया गया है। 'शताब्दी वर्ष' अतीत के इतिहास खण्ड का पुनर्मूल्यांकन होता है जिसके द्वारा हम सीमित और संकुचित होती हुई मानव दृष्टि को व्यापक और विस्तृत बनाते हुए अपने चिन्तन और कार्य में उस महापुरुष के जीवन आदर्शों से प्रेरणा ग्रहण करते हैं। 'शताब्दी वर्ष' सांस्कृतिक परम्परा के पुनर्आख्यान के रूप में किसी विशिष्ट के प्रति आदर दृष्टि रखते हुए उन आदर्शों, सिद्धान्तों और जीवन मूल्यों को वर्तमान परिधि में आँकने का प्रयास होता है जिनके निर्वहन एवं संवर्धन में उस महापुरुष का जीवन समर्पित रहा होता है। 'शताब्दी वर्ष' का महत्व इस दृष्टि से और भी बढ़ जाता है क्योंकि इनके माध्यम से ही आगामी पीढ़ियों और वर्तमान पीढ़ी के साथ अतीत की पीढ़ी का सीधा सम्प्रेषण तथा इतिहास बोध के साथ ही साथ जीवन बोध का भी परिज्ञान बना रहता है।

समाज-सुधार, स्वस्थ राजनीति, पत्रकारिता, साहित्य एवं मानवता के उन्नयन के लिए अपने जीवन का एक-एक क्षण समर्पित करने वाले अमर शहीद विद्यार्थी जी के जीवन में देश प्रेम और स्वाभिमान की अजस्र धारा प्रवाहित थी। 'सरस्वती' और 'अभ्युदय' जैसी यशस्वी पत्रिकाओं के सम्पादन कार्य से सम्बद्ध रहकर साधनों के अभाव में 'प्रताप' का प्रकाशन प्रारम्भ कर तथा 'हिन्दू फ्रेंड्स एसोसिएशन' जैसी संस्थाओं की स्थापना करके विद्यार्थी जी ने इन्हीं उदात्त मूल्यों में प्राण फूंकने का स्तुत्य प्रयास किया था। देश की परतंत्रता के प्रति उनकी आत्मा की कसक ने ही उनमें ब्रिटिश सत्ता से बेखौफ रहते हुए भगत सिंह, 'बिस्मिल', अशफाक उल्ला खाँ जैसे क्रांतिकारियों को 'प्रताप' प्रेस में रखने का जोखिम उठाने की जीवनी शक्ति प्रदान की थी। अंग्रेजी शासन के दमनचक्र, अन्याय और शोषण के प्रति जीवन भर संघर्ष करते हुए अपनी प्रतिभा मंडित तेजस्वी पत्रकारिता के माध्यम से स्वतंत्रता प्राप्ति के महायज्ञ में उनका जनजागृति का योगदान चिरस्मरणीय रहेगा।

यह एक दुखद संयोग ही है कि साम्प्रदायिक सद्भाव के जिन उच्चतर आदर्शों की स्थापना हेतु उन्होंने 25 मार्च, 1931 को अपने जीवन का बलिदान किया था, उन पर आज स्वतंत्र भारत में भी अशुभ छाया मंडरा रही है। साम्प्रदायिक तनावों के आज के वातावरण में विद्यार्थी जी के बलिदान, उनके व्यक्तित्व एवं कृतित्व से प्रेरणा ग्रहण करना ऐसी परिस्थितिजन्य अनिवार्यता भी है जिसके महत्व का आकलन करने के लिए आने वाली पीढ़ियाँ बाध्य होंगी।

हर्ष की बात है कि उत्तर प्रदेश सरकार के सांस्कृतिक कार्य विभाग की इकाई राज्य पुरातत्व संगठन द्वारा 'शोध पत्रिका' के प्रकाशन के पावन संकल्प को मूर्तरूप देकर इसका श्रीगणेश कीर्तिशेष अमर शहीद गणेश शंकर विद्यार्थी के शताब्दी वर्ष में ही किया जा रहा है और इसका प्रथम पुष्प उन्हीं की पुण्य स्मृति में समर्पित है। मुझे आशा है कि यह पत्रिका भारत की सांस्कृतिक एवं पुरातात्विक सम्पदा को प्रकाश में लाने के अपने उद्देश्य में सफल और जिज्ञासुओं के लिए उपयोगी सिद्ध होगी।

(अशोक कुमार)
निदेशक
सांस्कृतिक कार्य, उ० प्र०

9 अक्तूबर, 1990
लखनऊ

आमुख

किसी ने सच कहा है कि हमारे भविष्य की कुंजी वर्तमान दृष्टिकोण से विगत को समझने में निहित है।

लेकिन हमारे विगत को कोई कैसे समझता है?
विगत के बारे में कैसे जानता है?

और सबसे महत्वपूर्ण यह है कि कोई अपने विगत विषयक ज्ञान को, वर्तमान के पूर्वाग्रहों और रागों से धूमिल और भ्रमित होने से कैसे बचाता है?

इतिहास और इतिहास-लेखन घटनाओं एवं तिथियों का संग्रह मात्र नहीं है, यह सदैव से विस्तृत तथ्यों में से कुछ का चयन करना रहा है। कुछ सुनिश्चित तथ्यों को जानबूझ कर सम्मिलित करने अथवा छोड़ने के कारण यह चयन सदैव विवाद और गहरी अभिरुचि का विषय रहा है, जो इनकी मान्यता के विषय में हमेशा वाद-विवाद को जन्म देता रहेगा।

परन्तु इतिहास लेखन का एक ऐसा क्षेत्र भी है, जिसमें उपलब्ध सामग्री यद्यपि कम है तथापि सभी विचार-धाराओं के लिए मान्य होने के साथ सभी अध्ययनों का प्रारम्भिक बिन्दु भी है, समस्या समाधान के लिये यह पहला चरण है-और वह है पुरातत्व।

पुरातत्व तथ्यों का ऐसा स्रोत है जिसकी प्रामाणिकता निर्विवाद है। एक बार मान्य होने के उपरान्त ये तथ्य अध्ययन के मूल आधार बन जाते हैं और इस प्रकार शोध कार्य में सहायक होते हैं। ऐसा इतिहास के किसी अन्य स्रोत द्वारा नहीं होता। फिर भी, पुरातत्व को उतना महत्व नहीं मिल सका है जितना उसे मिलना चाहिए।

यह प्रसन्नता का विषय है कि उत्तर प्रदेश शासन के पुरातत्व विभाग ने एक शोध पत्रिका के प्रकाशन का ठोस कदम उठाया है। पुरातत्व में सर्वांगीण अभिरुचि उत्पन्न करने हेतु; सिद्धान्त को प्रयोग, अध्येताओं को पुराविदों तथा अध्यापकों को विद्यार्थियों से जोड़ने की दिशा में यह एक प्रशंसनीय एवं अपेक्षित प्रयास होगा।

उतना ही महत्वपूर्ण यह भी है कि यह पत्रिका उत्तर प्रदेश को, देश-विदेश के अन्य भागों में पुरातत्व के क्षेत्र में हो रहे प्रयासों तथा ऐतिहासिक विज्ञान की सभी विधाओं से सम्बद्ध करेगी।

यह पत्रिका नियमित रूप से प्रकाशित की जायेगी तथा केवल उत्तर प्रदेश ही नहीं वरन् अन्य प्रदेशों एवं देशों में इस दिशा में किये जा रहे प्रयासों पर भी प्रकाश डालेगी। पुरातत्व से सम्बन्धित अन्य विषयों से भी इसका सम्बन्ध रहेगा क्योंकि पुरातत्व ऐतिहासिक अध्ययन की अन्य विधाओं के लिए भी पूरक एवं स्रोत सामग्री उपलब्ध कराता है। इस प्रकार यह पत्रिका पूर्ण पृष्ठभूमि में सही तस्वीर प्रस्तुत करने का प्रयत्न करेगी।

मैं डा० राकेश तिवारी, निदेशक, उ० प्र० राज्य पुरातत्व संगठन को उनके साहसिक एवं प्राथमिक प्रयासों के लिये बधाई देता हूँ और मुझे इसमें कोई संदेह नहीं है कि ये प्रयास बीते हुए कल की खोज के माध्यम से भविष्य के द्वार खोलने के हमारे प्रयत्नों को फलीभूत करेंगे। ऐसे प्रयासों में, उत्तर प्रदेश शासन का सांस्कृतिक कार्य विभाग हर प्रकार की सहायता एवं सहयोग प्रदान करेगा।

आलोक सिन्हा

(आलोक सिन्हा)
सचिव
सांस्कृतिक कार्य, उ० प्र० शासन।

9 अक्तूबर, 1990
लखनऊ

यह एक दुखद संयोग ही है कि साम्प्रदायिक सद्भाव के जिन उच्चतर आदर्शों की स्थापना हेतु उन्होंने 25 मार्च, 1931 को अपने जीवन का बलिदान किया था, उन पर आज स्वतंत्र भारत में भी अशुभ छाया मंडरा रही है। साम्प्रदायिक तनावों के आज के वातावरण में विद्यार्थी जी के बलिदान, उनके व्यक्तित्व एवं कृतित्व से प्रेरणा ग्रहण करना ऐसी परिस्थितिजन्य अनिवार्यता भी है जिसके महत्व का आकलन करने के लिए आने वाली पीढ़ियाँ बाध्य होंगी।

हर्ष की बात है कि उत्तर प्रदेश सरकार के सांस्कृतिक कार्य विभाग की इकाई राज्य पुरातत्व संगठन द्वारा 'शोध पत्रिका' के प्रकाशन के पावन संकल्प को मूर्तरूप देकर इसका श्रीगणेश कीर्तिशेष अमर शहीद गणेश शंकर विद्यार्थी के शताब्दी वर्ष में ही किया जा रहा है और इसका प्रथम पुष्प उन्हीं की पुण्य स्मृति में समर्पित है। मुझे आशा है कि यह पत्रिका भारत की सांस्कृतिक एवं पुरातात्विक सम्पदा को प्रकाश में लाने के अपने उद्देश्य में सफल और जिज्ञासुओं के लिए उपयोगी सिद्ध होगी।

(अशोक कुमार)
निदेशक
सांस्कृतिक कार्य, उ० प्र०

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आमुख

किसी ने सच कहा है कि हमारे भविष्य की कुंजी वर्तमान दृष्टिकोण से विगत को समझने में निहित है।

लेकिन हमारे विगत को कोई कैसे समझता है?
विगत के बारे में कैसे जानता है?

और सबसे महत्वपूर्ण यह है कि कोई अपने विगत विषयक ज्ञान को, वर्तमान के पूर्वाग्रहों और रागों से धूमिल और भ्रमित होने से कैसे बचाता है?

इतिहास और इतिहास-लेखन घटनाओं एवं तिथियों का संग्रह मात्र नहीं है, यह सदैव से विस्तृत तथ्यों में से कुछ का चयन करना रहा है। कुछ सुनिश्चित तथ्यों को जानबूझ कर सम्मिलित करने अथवा छोड़ने के कारण यह चयन सदैव विवाद और गहरी अभिरुचि का विषय रहा है, जो इनकी मान्यता के विषय में हमेशा वाद-विवाद को जन्म देता रहेगा।

परन्तु इतिहास लेखन का एक ऐसा क्षेत्र भी है, जिसमें उपलब्ध सामग्री यद्यपि कम है तथापि सभी विचार-धाराओं के लिए मान्य होने के साथ सभी अध्ययनों का प्रारम्भिक बिन्दु भी है, समस्या समाधान के लिये यह पहला चरण है-और वह है पुरातत्व।

पुरातत्व तथ्यों का ऐसा स्रोत है जिसकी प्रामाणिकता निर्विवाद है। एक बार मान्य होने के उपरान्त ये तथ्य अध्ययन के मूल आधार बन जाते हैं और इस प्रकार शोध कार्य में सहायक होते हैं। ऐसा इतिहास के किसी अन्य स्रोत द्वारा नहीं होता। फिर भी, पुरातत्व को उतना महत्व नहीं मिल सका है जितना उसे मिलना चाहिए।

यह प्रसन्नता का विषय है कि उत्तर प्रदेश शासन के पुरातत्व विभाग ने एक शोध पत्रिका के प्रकाशन का ठोस कदम उठाया है। पुरातत्व में सर्वांगीण अभिरुचि उत्पन्न करने हेतु; सिद्धान्त को प्रयोग, अध्येताओं को पुराविदों तथा अध्यापकों को विद्यार्थियों से जोड़ने की दिशा में यह एक प्रशंसनीय एवं अपेक्षित प्रयास होगा।

उतना ही महत्वपूर्ण यह भी है कि यह पत्रिका उत्तर प्रदेश को, देश-विदेश के अन्य भागों में पुरातत्व के क्षेत्र में हो रहे प्रयासों तथा ऐतिहासिक विज्ञान की सभी विधाओं से सम्बद्ध करेगी।

यह पत्रिका नियमित रूप से प्रकाशित की जायेगी तथा केवल उत्तर प्रदेश ही नहीं वरन् अन्य प्रदेशों एवं देशों में इस दिशा में किये जा रहे प्रयासों पर भी प्रकाश डालेगी। पुरातत्व से सम्बन्धित अन्य विषयों से भी इसका सम्बन्ध रहेगा क्योंकि पुरातत्व ऐतिहासिक अध्ययन की अन्य विधाओं के लिए भी पूरक एवं स्रोत सामग्री उपलब्ध कराता है। इस प्रकार यह पत्रिका पूर्ण पृष्ठभूमि में सही तस्वीर प्रस्तुत करने का प्रयत्न करेगी।

मैं डा० राकेश तिवारी, निदेशक, उ० प्र० राज्य पुरातत्व संगठन को उनके साहसिक एवं प्राथमिक प्रयासों के लिये बधाई देता हूँ और मुझे इसमें कोई संदेह नहीं है कि ये प्रयास बीते हुए कल की खोज के माध्यम से भविष्य के द्वार खोलने के हमारे प्रयत्नों को फलीभूत करेंगे। ऐसे प्रयासों में, उत्तर प्रदेश शासन का सांस्कृतिक कार्य विभाग हर प्रकार की सहायता एवं सहयोग प्रदान करेगा।

(आलोक सिन्हा)
सचिव
सांस्कृतिक कार्य, उ० प्र० शासन।

9 अक्तूबर, 1990
लखनऊ

सम्पादकीय

प्राग्धारा का पहला अंक आपके समक्ष प्रस्तुत करते हुए हमें अपार सन्तोष का अनुभव हो रहा है। हिमालय से विन्ध्य और अरावली से गंगा-घाघरा संगम तक विस्तृत, उत्तर प्रदेश के विविध रूपी, भू-भाग में सहस्रों वर्षों से रह रहे मानव ने जगह-जगह, पाषाण उपकरणों, अभिलेखों और स्मारकों आदि के रूप में अपने निशान छोड़े हैं। उनके आधार पर तत्कालीन सभ्यताओं-संस्कृतियों के स्वरूप को समझने के लिए अनेक पुराविद्, वैज्ञानिक और अध्येता निरन्तर प्रयत्नरत हैं। इस प्रक्रिया में प्रत्येक वर्ष प्रदेश के विभिन्न भागों में पुरातात्विक सर्वेक्षण एवं उत्खनन कराये जा रहे हैं। सर्वेक्षक पुरास्थलों को खोजने और उत्खननकर्त्ता जमीन में दबे साक्ष्यों को उनके सही सन्दर्भ में प्रस्तुत करने में लगे हैं। अलग-अलग दृष्टिकोणों से इन पर शोध हो रहे हैं। प्राचीन जलवायु, जीवों, वनस्पतियों और तकनीकों का भी अध्ययन किया जा रहा है। इसके अतिरिक्त बहुमूल्य पुरावशेषों को भविष्य के लिये सुरक्षित रखने के प्रयत्न तथा उपाय विकसित करने के कार्य किये जा रहे हैं।

अन्य प्रदेशों और देशों में भी इस दिशा में महत्वपूर्ण कार्य हो रहे हैं जो हमारे प्रयासों में सहायक होने के अतिरिक्त उन्हें व्यापक पृष्ठभूमि प्रदान कर सकते हैं। इसी प्रकार हमारी उपलब्धियाँ अन्य क्षेत्रों कें कार्यों की पूरक हो सकती हैं। अतः इस प्रदेश और उसके बाहर किये जा रहे ऐसे प्रयासों के विषय में उपलब्ध सामग्री को एक जगह प्रकाशित करके इस प्रक्रिया को गति प्रदान की जा सकती है।

उत्तर प्रदेश शासन ने प्रदेश के पुरावशेषों के सर्वेक्षण, उत्खनन, संरक्षण और प्रकाशन के दायित्व उ० प्र० राज्य पुरातत्व संगठन को सौंपे हैं। प्रदेश के विस्तृत स्वरूप के कारण तद्सम्बन्धी उत्तरदायित्व उत्तरोत्तर बढ़ते जा रहे हैं। दिनोंदिन अनेक प्राचीन स्थल, स्मारक प्रकाश में आते जा रहे हैं, पहले से बहुत से ज्ञात हैं और आगे इनके मिलते रहने का अन्त नहीं है। इनके संरक्षण-अध्ययन के लिये अनिवार्य है कि इस संगठन के विशेषज्ञ अपनी उपलब्धियों, अपने विचारों और निष्कर्षों का आदान-प्रदान अन्य संस्थाओं के विशेषज्ञों से करते रहें, जिससे वे अपने कार्यों की समुचित समीक्षा के साथ अपनी उपलब्धियों से उनको और उनके निष्कर्षों से स्वयं को लाभान्वित कर सकें। यह प्रक्रिया उन्हें सदैव स्फूर्तिवान, सजग एवं संतुलित रह कर अपने दायित्वों के निर्वहन में सक्षम बना सकेगी।

अतः हमें संवाद के ऐसे माध्यम की आवश्यकता है जिससे पुरातत्व संगठन एवं स्वधर्मी संस्थाओं में पारस्परिक विचार-विनियमय हो सके। इसके लिये सबसे कारगर और आजमाए हुए उपाय हैं– नियमित प्रकाशन और संगोष्ठियों का आयोजन। इनकी निर्विवाद उपादेयता को दृष्टिगत रखकर इस वर्ष उ० प्र० राज्य पुरातत्व संगठन द्वारा इन दोनों सशक्त माध्यमों का शुभारम्भ किया जा रहा है। हमारा विश्वास है कि इस प्रकार हम इस दिशा में सदियों से किये जा रहे प्रयत्नों की 'प्राग्धारा' में अपनी पीढ़ी का योगदान भी समाहित कर सकेंगे।

शोध पत्रिका के प्रकाशन के निर्णय का विद्वान पुराविदों द्वारा जो प्रत्युत्तर हमें मात्र चार माह में प्राप्त हुआ है उसने हमारे इस प्रयास को बड़ा सम्बल प्रदान किया है। इस अल्पावधि में हमें इतने अधिक लेख प्राप्त हो गये हैं, और हो रहे हैं कि यथासंभव पत्रिका का आकार बढ़ाने के बाद भी स्थानाभाव के कारण उन्हें इसी अंक में प्रकाशित करना सम्भव नहीं हो पाया है और इसके लिये हमें, अनेक विद्वानों से, क्षमा-याचना करने की आवश्यकता पड़ गयी है। यह इस बात का द्योतक है कि ऐसी पत्रिका के प्रकाशन की कितनी अधिक आवश्यकता है।

उत्तर प्रदेश में गत एक वर्ष में हुई पुरातत्व विषयक गतिविधियों में मिर्जापुर जिले में चुनार के निकट प्राचीन खदानों का मिलना, गोरखपुर-बस्ती में ताम्राश्मयुगीन स्थलों, देवगढ़ (ललितपुर) से पुराश्मकालीन और कानपुर जनपद से बौद्ध स्पूप के अवशेषों का पाया जाना सम्मिलित है। तद्विषयक शोध पत्र इस अंक में प्रकाशित किये

जा रहे हैं। इतिहास लेखन के अन्य प्रमुख स्रोतों– अभिलेख, मूर्तियों, भित्ति चित्रों, स्मारकों आदि से सम्बन्धित इस अंक में सम्मिलित लेखों में भी नवीन जानकारियाँ दी जा रही हैं। परिरक्षण, पुरावनस्पति और धातु विज्ञान जैसे विषयों के लेखों का प्रतिनिधित्व प्राचीन संस्कृति के विविध पक्षों के अध्ययन में वैज्ञानिकों की बढ़ती हुई अभिरुचि का परिचायक है। उपर्युक्त माध्यमों से उपलब्ध जानकारी के आधार पर अन्ततः इतिहास लेखन का सर्व महत्वपूर्ण कार्य किया जाता है जिससे हम अपने इतिहास को समग्रता से समझ कर, वर्तमान के लिये उसका समुचित उपयोग कर, अच्छे कल का रास्ता बना सकें। अतः इन प्रयासों की पूर्णता के लिये पत्रिका का इतिहासकारों से जुड़ा रहना अनिवार्य है, इसलिए प्रस्तुत अंक में इस विधा से सम्बन्धित लेख भी सम्मिलित किये गये हैं।

प्रस्तुत अंक में प्रकाशित शोध पत्र उत्तर प्रदेश, पश्चिम बंगाल, बिहार, मध्य प्रदेश, पंजाब, गुजरात, कर्नाटक और तमिलनाडु की संस्थाओं और विषयवस्तु का प्रतिनिधित्व कर रहे हैं। हमें विश्वास है कि अगले अंक में और अधिक संस्थाओं और विधाओं के विद्वान इस धारा को समृद्ध करने में अपना योगदान करेंगे।

यहाँ यह उल्लेख करना युक्तियुक्त होगा कि इस शोध पत्रिका के प्रकाशन का सुझाव श्री आलोक सिन्हा, सचिव, सांस्कृतिक कार्य ने दिया। इसके उपरान्त उन्होंने इस विषय में गहरी अभिरुचि एवं उत्साह के साथ हर सम्भव सहयोग प्रदान किया। उनके द्वारा लिखे गये संक्षिप्त आमुख में अभिव्यक्त उनकी इतिहास दृष्टि हमें क्षितिज तक ले जाती है। पुरातत्व परिवार उनका हृदय से आभारी है।

पत्रिका के प्रारम्भिक अंक के लिये धन की व्यवस्था हेतु श्री अतुल बगाई, पूर्व संयुक्त सचिव तथा अमर शहीद गणेश शंकर विद्यार्थी का परिचयात्मक विवरण लिखने के लिये हम श्री अशोक कुमार, निदेशक, सांस्कृतिक कार्य विभाग, उ० प्र० के प्रति विनम्र धन्यवाद ज्ञापित करते हैं। यह हमारा सौभाग्य ही है कि प्रशासकीय औपचारिकताओं को तत्परता से पूरा कराने के लिये हमें हर समय सन्नद्ध रहने वाले श्री अवधेश कुमार सिंह राठौर जैसे सांस्कृतिक कार्य विभाग के उपनिदेशक मिल सके।

प्रस्तुत शोध पत्रिका के लिये लेख प्राप्त करने के सन्दर्भ में संयोग से श्री के० वी० सौन्दरराजन से मिलने का सुअवसर प्राप्त होने पर उन्होंने इस प्रयत्न के लिये प्रेरित करते हुए जो नाम सुझाया वह इसके मुखपृष्ठ की शोभा बढ़ा रहा है। पत्रिका के नाम के साथ हम सदैव उनका स्मरण करते रहेंगे।

विद्वान लेखकों के सहयोग पर आधारित यह प्रयत्न उनकी उदार अनुकम्पा से ही फलीभूत हो रहा है। इसके लिए हम उनके प्रति सादर कृतज्ञता अर्पित करते हुए भविष्य में भी ऐसी ही कृपा के आकांक्षी हैं।

पत्रिका के स्वरूप एवं आकार आदि के चयन में प्रो० किरण कुमार थपल्याल का सहयोग और मार्गदर्शन सहज सुलभ रहा है। अत्यधिक व्यस्त रहने पर भी वे सदैव हर प्रकार का सहयोग देने के लिये तैयार रहे हैं। हम उनके प्रति आत्मीय भाव रखते हुए हार्दिक आभारी हैं।

इस प्रकाशन का श्रेय पुरातत्व संगठन के सभी कर्मियों को है, जिन्होंने यथा आवश्यक इस कार्य में अपना सहयोग किया है। इस सन्दर्भ में विशेष रूप से मैं अपने सहकर्मी श्री गिरीश चन्द्र सिंह का उल्लेख करना चाहूँगा जिन्होंने मुद्रण कार्य के लिये जिस परिश्रम और लगन से कार्य किया है, उसके अभाव में इतने कम समय में यह प्रकाशन संभव नहीं हो पाता। इसके लिये उनकी जितनी भी प्रशंसा की जाये कम है।

मुख पृष्ठ की डिजाइन तैयार करने तथा सुन्दर छपाई के लिये हम क्रमशः श्री पी० के० शर्मा और सर्वश्री प्रतिभा प्रेस के प्रति धन्यवाद व्यक्त करते हैं।

11 अक्तूबर, 1990
लखनऊ

राकेश तिवारी
निदेशक
उ० प्र० राज्य पुरातत्व संगठन

प्राग्धारा

PRĀGDHĀRĀ

मिहिरभोज का नया शिलालेख

कृष्ण दत्त बाजपेयी

उत्तर प्रदेश के विभिन्न स्थलों से प्राचीन इतिहास की स्त्रोत-सामग्री प्रचुर मात्रा में उपलब्ध हुई है। इससे क्षेत्रीय इतिहास की जानकारी में वृद्धि हुई है। अनेक पुरातात्त्विक अवशेष ऐसे भी मिले हैं, जिनसे भारतीय इतिहास और संस्कृति के व्यापक परिप्रेक्ष्य में प्रकाश पड़ा है।

उक्त स्रोतों में शिलालेखों, ताम्रपत्रों और अभिलिखित मुद्राओं का विशेष स्थान है। स्वतंत्रता-प्राप्ति के बाद इस दिशा में उल्लेखनीय खोजें हुई हैं।

प्राचीन भारतीय राजवंशों में गुर्जर-प्रतिहार वंश का विशेष स्थान है। पंजाब, हरयाणा, गुजरात और राजस्थान से लेकर मध्य प्रदेश के पश्चिमी और उत्तरी भाग तक उनके साम्राज्य का विस्तार था। उनके राज्यकाल में उत्तर भारत में एक दृढ़ शासन-व्यवस्था स्थापित हुई। साथ ही धर्म, कला और साहित्य का उन्नयन भी उनके समय में बड़े रूप में हुआ। वैदिक-पौराणिक धर्म के साथ-साथ अन्य धर्मों के विकास के लिए यह शासनकाल स्मरणीय है।

सम्राट हर्षवर्धन के पहले मौखरि वंश के समय में कान्यकुब्ज (वर्तमान कन्नौज) को एक महत्वपूर्ण राजनीतिक और सांस्कृतिक केन्द्र बनने का अवसर मिला। मौखरि शासक गृहवर्मा के साथ हर्ष की बहिन राजश्री का विवाह हुआ। विरोधियों द्वारा गृहवर्मा की हत्या के बाद, हर्ष पर यह भार आ पड़ा कि वे अपनी राजधानी को थानेश्वर से कन्नौज में स्थापित कर वहाँ से शासन-तंत्र चलायें। हर्ष का साम्राज्य प्रायः सम्पूर्ण उत्तर भारत पर था। उसे "सकलोत्तरापथ-नाथ" का गौरव प्रदान किया गया। उसके समय में कनौज तथा अन्य नगरों की बड़ी उन्नति हुई।

कुछ समय पूर्व हर्षवर्धन की सोने की एक मुद्रा फर्रुखाबाद से मिली थी। उस पर हर्ष के आराध्य देव शिव-पार्वती का अंकन है। सिक्के के दूसरी ओर उपाधियों सहित हर्ष का नाम लिखा है।

हर्षवर्धन के बाद कन्नौज के सिंहासन पर जिस प्रमुख राजवंश का आधिपत्य हुआ, वह गुर्जर-प्रतिहार वंश था। इस वंश में मिहिरभोज (राज्यकाल 836 से 885 ई०) सबसे अधिक प्रतापी शासक हुआ। वंश के अन्य मुख्य नृपति महेन्द्रपाल (885 – 910) तथा महीपाल (912 – 44 ई०) थे। प्राचीन पंचाल जनपद उनके साम्राज्य के अंतर्गत था। पंचाल के दो मुख्य नगर– अहिच्छत्रा और कंपिल (कांपिल्य) थे। दोनों नगर वैदिक धर्म के साथ परवर्तीकाल में जैन धर्म के भी प्रमुख केन्द्र बने। वर्तमान कंपिल और कन्नौज उत्तर प्रदेश के फर्रुखाबाद जिले में स्थित हैं।[1]

कुछ समय पहले कंपिल नगर से लगभग 8 किलोमीटर दूर झिंझौटा नामक गाँव में प्रतिहार-शासक मिहिरभोज का एक नया शिलालेख प्राप्त हुआ। इस खोज का श्रेय पंचाल शोध संस्थान के कार्यवाहक अध्यक्ष श्री हजारीमल बाँठिया की धर्मपत्नी श्रीमती जतन कुमारी बाँठिया को है। उन्होंने कंपिल और झिंझौटा के बीच स्थित अनेक मन्दिरों का पता लगाया। झिंझौटा में उन्हें ज्ञात हुआ कि गाँव के समीप के नाले से एक पत्थर मिला है, जिस पर किसी प्राचीन भाषा का लेख खुदा है। श्रीमती बाँठिया से सूचना मिलने पर मैं कंपिल होकर झिंझौटा गया। उक्त लेख को गाँव के प्रमुख ने अपने घर की बाहरी दीवाल में जड़ दिया था। वह सभी की उत्सुकता का विषय बना हुआ था।

लेख वाले पत्थर को देखकर मुझे बड़ा हर्ष हुआ। उम्दा प्रकार का यह पत्थर हलके हरे रंग का है और आयताकार है। लेख उत्कीर्ण करने के लिए यह पाषाण-खंड किसी दूर स्थान से मंगाया गया होगा। पत्थर पर 8 पंक्तियों का लेख है। अक्षर गहराई से उत्कीर्ण है और वे बहुत कलापूर्ण ढंग से लिखे गये हैं। लेख की लिपि 9वीं शती की ब्राह्मी लिपि है, जो तब आधुनिक नागरी लिपि का रूप धारण करने लगी थी।

पत्थर पर लेख शुद्ध प्राजल संस्कृत में उकेरा गया है। उसमें कुल 5 श्लोक हैं, जो 8 पंक्तियों में पूरे हुए हैं। लेख का वाचन मैंने इस प्रकार किया है :

ओं आत्मानन्दः प्रशमनिरतो बुद्ध्यहंकारहेतो --
मोहाज्जातो य इह भगवान्नाम रूप-प्रपञ्चः -1-
तत्वापन्नं प्रविलयविधेस्तं विवेकेनसूनो --
वन्दे देवं धृतिमयमजं शुद्धसंविद्धिभूतिं -2-
पातु-र्विश्वस्य सम्यक् परममुनिमतं श्रेयसे संविधाना-
दन्तर्वृ ति-र्विवेकः स्थित इव पुरतो भोजदेवस्य राज्ञः -3-
विद्व-द्वृन्दार्जितानां फल-मिव तपसां धान्यपालस्यसूनु-
र्व्वालादित्यः सुधाम्नः परमचलमिदं कारयामास धातुः -4-
सारस्वत-रसा-पूर्ण्ण-मालवालत्वमाप्नुयात्।
श्रीशालाप्रतिष्ठं सुब्रह्मस्तम्भस्य सम्पदः -5-

लेख की प्रथम तीन पंक्तियों में आत्मानंद-रूप देवदेव भगवान् विष्णु की स्तुति है। तीसरे श्लोक के अन्त में कान्यकुब्ज के शासक मिहिरभोज का नाम आया है। चौथे श्लोक में धान्यपाल के पुत्र बालादित्य का नाम है, जिनके द्वारा भगवान् के मन्दिर का निर्माण कराया गया। अन्तिम पाँचवें श्लोक में बालादित्य के द्वारा संपन्न मूर्ति-प्रतिष्ठापना की सराहना की गई है। प्रतीत होता है कि बालादित्य ने जिस मंदिर का निर्माण कराया वह कंपिल अथवा झिंझौटा ग्राम के आसपास था। इस क्षेत्र में पूर्व-मध्यकालीन बहुसंख्यक कलावशेष मिले हैं। ये अधिकांश वैदिक-पौराणिक धर्म के हैं।

गुर्जर-प्रतीहार वंशी महान् शासक मिहिरभोज विष्णु के उपासक थे। उनकी उपाधि "आदिवराह" थी। उनके बहुसंख्यक सिक्कों पर यह उपाधि अंकित मिली है। ये सिक्के चाँदी और ताँबे के मिले हैं। सिक्कों पर वीर भाव में विष्णु के अवतार वराह का अंकन है।[2]

बालादित्य, जिनका नाम इस लेख में आया है, सम्राट मिहिरभोज के विशेष अधिकारी थे। सम्राट भोज के कई महत्वपूर्ण पुरालेख अन्य स्थानों से प्राप्त हुए हैं, जिन पर भोज के राजवंश तथा उनकी स्वयं की उपलब्धियों के विवरण दिये गये हैं।

कानपुर जिला के बराह नामक गाँव से मिहिरभोज का एक ताम्रपत्र मिला था। उस पर संस्कृत गद्य-पद्य में लेख उत्कीर्ण है। उस लेख में कहा गया है कि कान्यकुब्ज प्रदेश के कालंजर मंडल के अन्तर्गत वलाक (वर्तमान वराह) नामक अग्रहार गाँव, वहाँ के एक ब्राह्मण-वंश को पूर्ववर्ती मौखरि शासक शर्ववर्मा द्वारा दान में दिया गया था। उसकी स्वीकृति बाद में प्रतीहार शासक नागभट द्वितीय के समय प्रदान की गयी। कलांतर में, इसी वंश के राजा रामभद्र के समय में राज्य-कर्मचारियों की अयोग्यता के कारण वह दान दूसरे के हाथों में चला गया। राजा भोज ने नये आज्ञापत्र द्वारा पूर्ववर्ती ब्राह्मण-वंश को वह दान पुनः दिलाया। इस शासन को लागू करने वाले अधिकारी का नाम बालादित्य दिया है, जिसकी माता का नाम राज्यभट्टारिका लिखा है। यह ताम्रपत्र विक्रम संवत् 893 (836 ई०) कार्तिक शुक्ल पंचमी को जारी किया गया।[3]

सम्राट भोज का एक बड़ा पाषाण-लेख ग्वालियर के सागर ताल से मिला है, जो विशेष महत्त्व का है। इसमें कुल सत्ताईस पंक्तियाँ हैं, जो विविध संस्कृत छंदों में लिखी गयी हैं। लेख में नागभट प्रथम से लेकर भोज तक के राजाओं की वंशावली और उनकी उपलब्धियाँ वर्णित हैं। लेख के अन्तिम शासक मिहिरभोज के लिए कहा गया है कि उसने पालवंशी धर्मपाल के पुत्र (देवपाल) को परास्त किया। फिर भोज ने अपनी रानियों के पुण्य-लाभ के लिए नरकद्विष (विष्णु) के लिए वहाँ एक मन्दिर का निर्माण कराया। जो प्रशस्ति वहाँ लिखी गयी उसके रचयिता भट्ट धन्नेक (धान्यपाल) के पुत्र यही बालादित्य थे।[4] उक्त लेख का संबंधित अंश यहाँ उद्धृत है:

राज्ञा तेन स्व-देवीनां यशः पुण्याभिवृद्धये।
अन्तः पुर-पुरं नाम्ना व्यधायि नरकद्विषः।।
यावन्नभः सुरसरित्प्रसरोत्तयैरीयं
यावत्सुदुश्चर-तपः प्रभव-प्रभावः।
सत्यञ्च यावदपरिस्थमवत्यशेषं
तावत् पु नातु जगतीमियमार्य-कीर्तिः।।
पातुर्विव्वश्वस्य सम्यक्परम-मुनि मत-श्रेयसस्सम्विधाना-
दन्तर्वृत्तिर्विव्वेकः स्थितैव पुरतो भोज देवस्य राज्ञः।
विद्वद्वृन्दार्ज्जितानां फलमिव तपसां भट्ट-धन्नेक-सूनु-
र्व्वा (र्ब्वा) लादित्य प्रशस्तेः कविरिह जगता साकमाकल्प-वृत्तेः।।

उक्त 3 लेखों के अलावा भोज के कतिपय अन्य लेखों में भी बालादित्य का नाम मिला है। इससे न केवल उनके महत्त्वपूर्ण पद का पता चलता है, अपितु यह भी ज्ञात होता है कि वे संस्कृत के एक अच्छे कवि थे। ग्वालियर के प्रस्तर लेख से यह बात विशेषतः प्रमाणित होती है। लेखों से पता चला है कि बालादित्य के पिता का नाम धान्यपाल (भट्ट धन्नेक) और माता का नाम राज्यभट्टारिका था। ग्वालियर से ही प्राप्त एक अन्य शिलालेख (भंडारकर सूची, सं० 36) भोज के समय का है। उस पर विक्रम संवत् 932 (875ई०) लिखा है। लेख के अनुसार सम्राट भोज द्वारा गोपाचल क्षेत्र के प्रशासन हेतु उचित व्यवस्था की गयी थी।

कंपिल का क्षेत्र प्राचीन कान्यकुब्ज साम्राज्य के अन्तर्गत था। झिझौंटा की दूरी वर्तमान कन्नौज से अधिक नहीं है। राजधानी के निकट प्राप्त होने वाला मिहिरभोज का यह लेख निस्संदेह महत्वपूर्ण है। झिंझौटा और उसके आसपास कई प्राचीन मन्दिरों के अवशेष प्राप्त हुए हैं और अनेक पाषाण-प्रतिमाएँ भी मिली हैं। झिंझौटा और कंपिल के बीच अनेक पुराने टीले हैं, जिनके उत्खनन से इस क्षेत्र के इतिहास पर नया प्रकाश पड़ सकता है। यहाँ से कुछ दूर बिलसड स्थल से कुमारगुप्त प्रथम के समय का एक शिलालेख मिला, जिस पर गुप्त संवत् 96 (415 ई०) अंकित है। लेख के अनुसार उस वर्ष एक विद्वान ब्राह्मण ध्रुवशर्मा द्वारा कार्तिकेय देवता के देवालय में भव्य द्वार का तथा दानशाला का निर्माण कराया गया।[5]

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भारतीय इतिहास की व्याख्या

लल्लनजी गोपाल

आधुनिक भारत जिन कुछ बातों को गम्भीरता से लेता है उसमें उसका अपना इतिहास एक है। आये दिन इतिहास के पुनर्लेखन के लिए मांग होती है और आंदोलन होते हैं। कभी-कभी यह शंका उठती है कि आज तक जो कुछ भी लिखा गया है क्या वह भ्रान्तिपूर्ण और असत्य है। इतिहास की किसी पुस्तक या उसके किसी अंश के विरोध में प्रतिक्रिया होती है जो कभी-कभी सशक्त और हिंसात्मक भी हो जाती है। इससे यह स्पष्ट हो जाता है कि भारत का अतीत उसके वर्तमान के लिए कितना सार्थक माना जाता है।

किसी भी देश का इतिहास उसके वर्तमान स्वरूप को समझने में सहायक होता है। कुछ देशों को छोड़कर, जिनका इतिहास के रंगमंच पर आगमन बहुत बाद के काल में सहसा हुआ है, हम साधारणतया ऐतिहासिक सातत्य देखते हैं। अनेक विषयों में हम वर्तमान के विकास और परिवर्तन की प्रवृत्तियों के सूत्र सरलता से अतीत में ढूँढ सकते हैं। पारम्परिक समाज में अतीत की प्रासंगिकता और भी अधिक सबल होती है। ऐसे समाज में अतीत एक जीवन्त यथार्थ है, वह वर्तमान में भी जीता रहता है। अतीत का अध्ययन बौद्धिक कौतूहल-मात्र नहीं होता।

कुछ लोग इतिहास में वर्तमान के लिए सुझाव और भविष्य के लिए सम्भावनाएँ खोजते हैं। वे ललक के साथ इतिहास की शिक्षाओं को ढूँढते हैं। किन्तु इन प्रयासों में ऐसे कई पूर्वाग्रह निहित हैं जिनका औचित्य संदिग्ध है। इतिहास को विज्ञान की श्रेणी में लाने के लिए हम उसे सामाजिक विज्ञान की संज्ञा देते हैं और अपने अहं की संतुष्टि करते है, किन्तु क्या हम विश्वास के साथ निश्चयात्मक उद्घोष कर सकते हैं कि हम इतिहास में साधारणीकरण कर सकते हैं, ऐसे साधारण नियमों को नए अवसरों पर घटित करके उनका परीक्षण कर सकते हैं और अतीत के ज्ञान के आधार पर पूर्व घोषणा कर सकते हैं। ऐतिहासिक ज्ञान के स्वरूप में इस लचरपन के होते हुए भी इतिहास से आशावादी अपेक्षाओं में कमी नहीं हुई है।

वर्तमान में इतिहास के अध्ययन और शोध की परम्परा एक पाश्चात्य देन है। इसमें सामग्री के संकलन, उसमें मूल्यांकन और संरचना के कई चरण हैं। अंतिम अवस्था में इतिहासकार कारण, स्थापना, स्पष्टीकरण, मूल्य-निर्णय और व्याख्या के चार कार्य करता है जो परस्पर सम्बद्ध होते हुए भी प्रथक् हैं। इनमें से प्रथम दो तो ऐतिहासिक संरचना के आवश्यक अंग हैं, किन्तु शेष दो अनिवार्य न होने के कारण कभी-कभी इतिहासकार के द्वारा उपेक्षित होते हैं। फिर भी ये इतिहास की उपयोगिता और सार्वजनिक आकर्षण के कारण हैं। प्रायः ये कार्य संरचना के अनन्तर ही उठाये जाते हैं। कभी-कभी ये इतिहास-लेखन के कार्य में ही संपृक्त रहते हैं और प्रारम्भ से ही इतिहासकार के सम्मुख उपस्थित रहते हैं। इतिहासकार इतिहास-संरचना की प्रक्रियाओं को इस प्रकार सम्पादित करता है जिससे ये उसकी व्याख्या की ओर ही चलें। ये दोनों कार्य इतिहास को दर्शनशास्त्र के समीप ले जाते हैं। व्याख्या के कार्य में इतिहासकार को यह सन्तोष रहता है कि वह अपने मौलिक शास्त्र से बहुत दूर नहीं जाता। वह इतिहास के आधारभूत तथ्यों से ही सम्बद्ध रहता है, यद्यपि वह इसकी सहायता से उच्चतर धरातल की ओर उठता है। इतिहास-संरचना का कार्य अन्ततोगत्वा व्याख्या के कार्य में शिखरीभूत होता है। व्याख्या इतिहास की परिणति है।

व्याख्या से तात्पर्य है अर्थ की खोज। यह अन्तर्भूत अर्थों और आत्यन्तिक तात्पर्य को उजागर करता है। इतिहास तथ्यों का संकलन मात्र नहीं है, तथ्यों को सार्थक रूप में परस्पर सम्बद्ध होना चाहिए। तथ्यों को एक माला में बांधने वाला एक सूत्र होता है। तथ्यों की प्रस्तुति एक संयोजना के रूप में होनी चाहिए। इतिहास में तथ्यों का अध्ययन प्रकरणों के आधार पर होता है। प्रकरण ही तथ्यों को एक सार्थकता, एक अन्तर्भूत सम्बन्ध प्रदान करते हैं। व्याख्या में इतिहासकार का कार्य होता है प्रकरणों की पहचान और संयोजना का निर्धारण करना।

व्याख्या का इतना महत्व होते हुए भी यह कैसे सम्पादित हो, इसके उद्देश्य क्या हैं, इसके आदर्श सिद्धान्त और विधियाँ क्या हैं, व्याख्याकार की क्या अर्हतायें हों, आदि प्रश्नों का उत्तर प्राप्य नहीं है। वास्तव में

इतिहासकार व्याख्या के अस्तित्व को स्वीकारने पर भी उसको अपने कर्तव्य का आवश्यक अंग नहीं मानता और न उसके लिए व्यवस्था और विधान बनाता है। टॉयनबी, श्पेंगलर और बिल, ड्यूरेन्ट जैसे महारथियों ने स्वयं व्याख्या करने पर भी इस व्यूह के भेदन के लिए सुचित मार्गदर्शन नहीं किया। फलस्वरूप इतिहास के व्याख्याताओं के प्रयासों में परस्पर भिन्नता है।

व्याख्या प्रमुखतः इतिहासकार का कार्य है, किन्तु जहाँ इसके प्रति उत्साही इतिहासकारों की संख्या अधिक नहीं है, वहीं अन्य लोगों ने इसमें रुचि ली है। कोई दार्शनिक, समाजशास्त्री या साधारण-जन, जिसने इतिहास की शास्त्रीय शिक्षा प्राप्त नहीं की है (पत्रकार इसका सर्वोत्कृष्ट उदाहरण हैं), इस प्रकार का प्रयास कर सकता है।

भारत में इतिहास-संरचना इंगलैंड, जर्मनी और फ्रांस के प्रभाव में प्रामाणिक तथ्यों के निर्धारण और उसकी वस्तुपरक प्रस्तुति को ही अपना लक्ष्य मानती रही है। व्याख्यात्मक इतिहास का चलन नहीं था। स्वतन्त्रता-प्राप्ति से पूर्व इस प्रकार के प्रयास उस संघर्ष के सन्दर्भ में ही होते थे। साम्राज्यवादी और राष्ट्रवादी इतिहासकार इतिहास की प्रस्तुति अपने पक्ष के समर्थन में एक तर्क के रूप में करते थे। साम्राज्यवादी इतिहासकारों में प्रमुख विंसेण्ट स्मिथ ने भारतीय इतिहास को विदेशी आक्रमणों की पुनरावृत्ति की एक लम्बी कथा मात्र कहा जिसका आनुषंगिक निष्कर्ष था कि भारत अपनी व्यवस्था स्वयं नहीं कर सकता। साथ ही यह भी कहा गया कि भारत को लोकतांत्रिक प्रशासन का कोई अनुभव नहीं रहा है, उसने तो केवल पूर्वी निरंकुशता को ही जाना है। इन दोनों स्थापनाओं को काशी प्रसाद जायसवाल जैसे राष्ट्रवादी इतिहासकारों ने विद्वतापूर्ण शोध के सहारे मुंहतोड़ जवाब दिया।

यह तो स्वीकारना होगा कि भारत के सम्पूर्ण इतिहास पर एक ही लेखक की रचना का प्रभाव है। इसी प्रकार इतिहास के प्रमुख काल-विभाजनों, प्राचीन, मध्य और आधुनिक, अथवा प्रमुख भौगोलिक विभाजनों पर भी ऐसी पुस्तकें अत्यल्प हैं। स्नातक और स्नातकोत्तर कक्षाओं मे इतिहास की लोकप्रियता के चलते प्रादेशिक भाषाओं में अनेक पुस्तकें प्रकाशित हुई हैं, किन्तु इनमें न कोई मौलिक प्रयास है और न नवीनतम शोधों का समुचित समावेश है। स्पष्ट है इस स्तर के ग्रंथों में नई व्याख्या की अपेक्षा नितान्त अनुचित होगी।

भारतीय इतिहास की लम्बी अवधि या विस्तृत क्षेत्र के संदर्भ में व्याख्या के अभाव का कारण है (यद्यपि यह विरोधाभास जैसा लगता है) इतिहास के अध्ययन में प्रगति। इतिहास में विशेषज्ञता बड़े पैमाने पर प्रवेश कर गई है। हम सीमित काल, क्षेत्र या स्रोत के ज्ञान में अपने अध्ययन को फैलाते हैं। परिणामतः अनेक इतिहासकारों को सम्पूर्ण इतिहास में रुचि नहीं रही। इन इतिहासकारों के प्रति न्याय करने के लिए यह कहना होगा कि कई को उस कार्य को करने में संकोच होता है जिसके लिए वे समुचित प्रशिक्षित नहीं हैं।

व्याख्या के लिए यह आवश्यक नहीं है कि वह सम्पूर्ण इतिहास की ही हो। सुविधा और व्यावहारिकता की दृष्टि से वह छोटे विभाजनों की भी हो सकती है। विभाजन सम्पूर्ण के अंग हैं। अतः उनकी व्याख्या सम्पूर्ण के परिप्रेक्ष्य में ही होनी चाहिए।

काल-विभाजन स्वयं ही व्याख्या की प्रक्रिया का एक अंग है। यदि विभाजन यांत्रिक न हो तो उसमें एक सूत्र या प्रकरण स्वीकृत होता है। उसका आधार स्वयमेव इतिहास की एक व्याख्या है। प्राचीन, मध्य और आधुनिक काल, काल-विभाजन के सरल प्रयास हैं, किन्तु इनकी सीमाएँ निर्धारित करने में हम उनको एक अभिप्राय से जोड़ देते हैं। उदाहरण के लिए मध्यकाल एक सीधा-सादा शब्द है। किन्तु यूरोपीय इतिहास के आधार पर यह अधःपतन, जड़ता, सामन्तवादी और स्थानीय अर्थव्यवस्था, संकीर्णता, धार्मिक संस्थाओं के वर्चस्व और कला और साहित्य में मौलिकता के अभाव का पर्याय माना गया। कुछ इतिहासकारों ने पूर्वाग्रह के साथ इन लक्ष्यों को भारतीय संदर्भ में आरोपित किया है। यह सत्य है कि कुछ सन्दर्भों में मध्यकाल अवरोध और अधःपतन का काल था, किन्तु कला, साहित्य, दर्शन, जीवन-विधि आदि के क्षेत्र में उसे अन्धकार का काल नहीं कहा जा सकता।

काल-विभाजन में एक दुष्परिणामकारी तत्व कुटिलता से जोड़ा गया और भारतीय इतिहास के तीनों कालों को हिन्दू, मुस्लिम और ब्रिटिश की संज्ञा दी गई। यदि इस विभाजन के समर्थन में यह कहा जाय कि इन तीनों कालों में स्रोत -सामग्री क्रमशः संस्कृत, फारसी और अंग्रेजी में है तो निश्चय ही यह नामकरण अत्यन्त भोंड़ा है। यह काल-विभाजन बहुत समय पूर्व ही त्याज्य हुआ, किन्तु किसी दुःस्वप्न की स्मृति की भांति यह आज भी पीड़ित करता है। काल-विभाजन की नई योजना, नये आधार पर निरन्तर व्यवहार में लाई जाने पर ही इस विष वृक्ष को समूल समाप्त करने में सफल होगी।

कुछ दशकों से इतिहासकार तीनों कालों में कुछ विशिष्ट विभाजन, महत्वपूर्ण घटनायें, विशिष्ट परिवर्तन और सशक्त प्रकरणों के माध्यम से व्याख्या-कार्य में सक्रिय हैं। यह परिवर्तन इतिहास को राजनीतिक इतिहास के समीकरण से मुक्त करने की प्रवृत्ति का परिणाम है। इतिहास साधारण-जन के जीवन के समीप आ रहा है। इतिहास व्यक्ति और समाज के जीवन और कार्य-कलापों का, उनको प्रभावित करने वाले कारकों को और विभिन्न पक्षों के अन्तःसम्बन्धों का अध्ययन है। इतिहास का व्याख्यात्मक रूप उन प्रकरणों में परिलक्षित होता है जो सम्प्रति प्रतिष्ठा प्राप्त किये हैं– आर्थिक जीवन के पक्ष, वाणिज्य और व्यापार, भूमि-व्यवस्था, औद्योगिक विकास, नगरीकरण, सामाजिक परिवर्तन और स्तरीकरण, साम्प्रदायिक सामंजस्य, राष्ट्रीय एकीकरण, 1857 और स्वतंत्रता की लड़ाई।

भारतीय इतिहास की व्याख्या किन लोगों ने की है और उनके क्या उद्देश्य रहे हैं इसकी विवेचना अत्यन्त रोचक है। व्याख्यात्मक इतिहास का राजनीतिक उपयोग स्वतंत्रता-संघर्ष के अनन्तर भी स्थगित नहीं हुआ। कुछ मूर्धन्य राजनीतिक व्यक्तियों ने स्वयं ऐसी व्याख्या की है। ऐसी रचनाओं में सर्वोत्कृष्ट उदाहरण जवाहर लाल नेहरू की कृति "डिस्कवरी आफ इंडिया" (भारत की खोज) का है। इसमें नेहरू का कोई राजनीतिक स्वार्थ नहीं था। इतिहास का कोई प्रतिश्रुत विद्वान निश्चय ही इस पुस्तक के कई कथनों के लिए नाक-भौं सिकोड़ सकता है। नेहरू ने भी स्वयं किसी शोध-कार्य का बीड़ा नहीं उठाया। वह भारत की खोज अपने लिए कर रहे थे। वह अपने देशवासियों, उनके गुण और दोषों और ऐतिहासिक प्रवृत्तियों को जानना चाहते थे जिससे वे विभिन्न समस्याओं की उत्पत्ति और स्वरूप को समझ सकें, उनका समुचित हल ढूंढ़ सकें और भारतीय जन की प्रतिभा और उनके इतिहास के अनुकूल कार्य-विधि को निर्धारित कर सकें।

दूसरे प्रसिद्ध राजनीतिक व्यक्ति, जिन्होंने भारतीय इतिहास की

व्याख्या की वह के० एम० मुंशी थे। वह भारतीय सांस्कृतिक चेतना, जिसने उसको बनाये रखा है, का दर्शन करना चाहते थे। वह अपने प्रमाणों का अनुसरण करते हैं, किन्तु वकील के रूप में उनकी मूल-भूत शिक्षा ने उनको प्रभावित किया था। कहीं-कहीं ऐसा प्रतीत होता है कि भावात्मक आधार पर अपनी व्याख्या का समर्थन वह प्रमाणों में पाना चाहते हैं।

के. एम. पाणिक्कर राजनयिक में परिवर्तित होने वाले इतिहासकार के उदाहरण हैं। वह अपनी मूलभूत विद्या के प्रति निष्ठावान बने रहे, किन्तु राजनयिक के रूप में अपनी भूमिका के कारण उन्होंने इतिहास की व्याख्या उन कारकों की खोज के लिए की जिन्होंने भारतीय इतिहास के विकास को प्रभावित किया और उस पर पाश्चात्य शक्तियों के प्रभुत्व को स्थापित किया। उनका सर्वप्रथम शोध-प्रकाशन हर्ष पर था। बाद में इन्होंने अपनी रुचि के क्षेत्र का विस्तार करके भारत के पूरे इतिहास का उसमें समावेश किया।

मार्क्सवादी व्यवस्था का अपना गुण है। किन्तु इसके राजनीतिक दर्शन ने इसके विचार के अन्य पक्षों को प्रभावित किया है। मार्क्सवादी सिद्धान्त को एक राजनीतिक दल ने अपनाया है। इसके अनुयायी इतिहास की मार्क्सवादी व्याख्या को लागू करते हैं। उनका यह विश्वास है कि यदि मार्क्स द्वारा प्रतिपादित प्रारम्भिक चरण इतिहास में वास्तव में घटित हुए हैं तो इसमें अनुवर्ती चरणों की अपरिहार्यता स्वीकार करने की मानसिकता बनती है। राजनीतिक सत्ता की प्राप्ति की लड़ाई में वोट और क्रांति निःसन्देह निर्णायक होते हैं, किन्तु ऐसी मानसिकता मार्क्सवादी व्यवस्था के विरुद्ध बौद्धिक विरोध को अशक्त करती है और उसके विकास के लिए अनुकूल भूमि बनाती है।

उस दिशा में सर्वप्रथम प्रयास श्रीपाद डांगे का था। उन्होंने प्रारम्भिक संस्कृत साहित्य से उद्धरणों को संकलित करके यह दर्शाना चाहा कि भारतीय इतिहास आदिम साम्यवाद और दासता के चरणों से गुजर चुका है। किन्तु उनका ग्रंथ भ्रांतिपूर्ण इतिहास का उदाहरण है; इसमें तिथिक्रम उलट-पुलट दिया गया है, सन्दर्भों को तोड़ा-मरोड़ा गया है और शब्दों और अंशों की मनमानी व्याख्या की गई है। अपने राजनीतिक वर्ग में भी उनकी व्याख्या का उत्साहपूर्ण स्वागत नहीं हुआ। परिणामस्वरूप न तो डांगे और न किसी दूसरे प्रतिश्रुत विद्वान ने इसे आगे बढ़ाया।

कुछ समय पूर्व ई० एम० एस० नम्बूदिरीपाद का ग्रंथ "ए हिस्ट्री ऑव इण्डियन फ्रीडम स्ट्रगिल" (भारतीय स्वतंत्रता संग्राम का एक इतिहास) प्रकाशित हुआ है। इसमें भारतीय कम्युनिस्ट पार्टी की दृष्टि से स्वतंत्रता संग्राम के इतिहास की नई व्याख्या प्रस्तुत की गई है। कम्युनिस्ट पार्टी की नीति और कार्यों को राष्ट्रीय हित के विरुद्ध कह कर तीव्र आलोचना हुई थी। चार दशकों के बाद जब गुबार शान्त हो गया है नम्बूदरीपाद ने अपने दल की निर्दोषिता सिद्ध करने के लिए तथ्यों की नई व्याख्या प्रस्तुत की है। यहाँ इतिहासकार वकील बन गया है और इतिहास का उपयोग राजनीतिक उद्देश्यों की पूर्ति के लिए हुआ है।

यह विवेचन हमें इतिहास की व्याख्या में प्रारूपों के उपयोग के प्रश्न की ओर ले जाता है। व्याख्या को संयत और दिशाबद्ध करने के लिए इनका उपयोग बढ़ रहा है। प्रारूप दो प्रकार के हो सकते हैं – एक आबद्ध और अपरिवर्तनीय और दूसरा जिसमें संभावनायें उन्मुक्त हैं। प्रथम में पूरा का पूरा ढाँचा स्वीकार कर लिया जाता है और सूचनाओं को उनमें भर दिया जाता है। दूसरे में दृष्टिकोण और प्रकरणों को प्रस्तुत किया जाता है और प्रमाणों द्वारा प्रस्तावित व्याख्या अपनाई जाती है।

प्रथम प्रकार के प्रारूपों में मार्क्सवादी उदाहरण सर्वविदित हैं। इनमें इतिहास की दिशा कुछ निश्चित चरणों के रूप में है और इनको सर्वत्र चरितार्थ समझा जाता है, किन्तु परवर्ती काल में प्राप्य ऐतिहासिक सामग्री के आधार पर विद्वानों ने मार्क्सवादी स्थापना में परिवर्तन की आवश्यकता को स्वीकार किया है। भारत और कुछ दूसरे एशियायी देशों की विलक्षणता भी पहचानी गई है। कुछ इतिहासकारों ने इन नये तथ्यों के आधार पर परिवर्तन की संभावना को नकारते हुए मूल मार्क्सवादी स्थापना के चरणों को भारतीय इतिहास में घटित करने का प्रयास किया है। निश्चय ही इससे भारतीय इतिहास में ऐसे नये तथ्य उजागर हुए हैं जो पहले प्रायः उपेक्षित रहते थे।

इस विवेचना में डी० डी० कोसाम्बी के योगदान की किसी भी प्रकार उपेक्षा नहीं की जा सकती। उन्होंने मार्क्सवाद का गहन अध्ययन किया था। किन्तु अपनी मौलिकता और बौद्धिक ईमानदारी के चलते वह किसी का भी अन्धानुसरण करने को तैयार नहीं थे। मार्क्स के लिए आदर की भावना के साथ ही वह कुछ स्थलों पर उनसे अपने मतभेद को छुपाते नहीं थे। भारतीय इतिहास में दास-प्रथा और सामन्तवाद की व्याख्या में उनके अपने निजी सुझाव थे।

वर्तमान काल में सामाजिक और आर्थिक इतिहास की प्रतिष्ठा कोसाम्बी और उनके शोध के प्रभाव के कारण बढ़ी है। उन्होंने दृष्टिकोण, प्रकरण और विधि के रूप में मार्क्सवादी प्रारूप का उपयोग किया। उन्होंने सभी क्षेत्रों में विकास की भौतिक पृष्ठभूमि की खोज, आर्थिक कारकों का महत्व, उत्पादन की विधि और तकनीक, सामाजिक वर्गों का निर्माण और उनके परस्पर संघर्ष को महत्व दिया और आख्याओं की व्याख्या के द्वारा उन्होंने अनेक महत्वपूर्ण तथ्यों की पहचान की है।

पिछले दशकों में इतिहास में समाजशास्त्रीय प्रारूपों के उपयोग का प्रचलन बढ़ा है। समाजशास्त्र ऐतिहासिक विकास की व्याख्या के लिए नए प्रकरणों को प्रस्तुत करता है। दूसरे समाज और काल के समाजशास्त्रीय अध्ययन से तुलना के लिए उदाहरण मिलते हैं। नृतत्वशास्त्रीय अध्ययन के द्वारा जनजातियों से सम्बन्धित प्रारूप मिलते हैं जो प्रारंभिक इतिहास के लिए सहायक हुए हैं, विशेष रूप से वहाँ जहाँ पुरातात्विक सूचना मुखर नहीं है और साहित्यिक साक्ष्य भ्रान्तिकारक हैं।

समाजशास्त्री यह स्वीकार करते हैं कि एक पारम्परिक समाज के अध्ययन के लिए इतिहास उपयोगी सहायक है। कुछ समाजशास्त्री भारतीय समाज के अध्ययन के लिए उसके इतिहास को परम् आवश्यक मानते हैं। ऐसे विद्वानों में जी० एस० घुर्ये प्रमुख हैं। उन्होंने समाजशास्त्रीय प्रकरणों का ही नहीं वैदिक और महाकाव्य काल जैसे विषयों का भी अध्ययन किया, जिन पर इतिहासकार अपना एकाधिकार मानता है। इतिहास और समाज के कुछ उपेक्षित पक्ष इस नई दृष्टि के कारण नए महत्व से मंडित हुए हैं। समाज के जड़ विवरण के स्थान पर एक गत्यात्मक व्याख्या का प्रचलन हुआ है।

कुछ इतिहासकार भारतीय इतिहास को कुछ विशिष्ट प्रकरणों के सन्दर्भ में देखते हैं। वे इसमें कुछ सिद्धान्तों और आदर्शों की परिणति देखते हैं। एक ऐसा प्रकरण है राष्ट्रीय एकता का। केन्द्रीकरण और विकेन्द्रीकरण के तत्व क्रम से प्रभावकारी रहे हैं। आज भी एम्ब्री जैसे इतिहासकार उन महत्वपूर्ण विचारों की खोज करते हैं जो भारतीय विविधता में एकता के सूत्र बने हैं।

इतिहासकार विचारों को निर्णायक कारक के रूप में स्वीकार करने पर भी इतिहास में उनके प्रवाह को अंकित करने के लिए छुटपुट उल्लेखों से आगे बढ़कर व्यापक प्रयास नहीं करता। जो कुछ उल्लेखनीय प्रकाशन हैं वे अरविन्दो, राधाकृष्णन, और देवराज जैसे दार्शनिकों की लेखनी से हैं। इस क्षेत्र में प्रो० जी० सी० पाण्डे इतिहासकारों में प्रमुख हैं। संस्कृति के विभिन्न क्षेत्रों में उन्होंने मूलभूत मूल्यों और व्यवस्थाओं की पहचान की है और इतिहास के पूरे विस्तार में उनकी स्थापना और परवर्ती काल में उनके क्रियान्वयन का निरूपण किया है।

प्राचीन भारतीय ग्रंथों में इतिहास का प्रगति और पतन के चक्र के रूप में उल्लेख है। कुछ इतिहासकारों ने भारतीय इतिहास पर इसे घटाया है, किन्तु केवल संक्षिप्त उल्लेख के रूप में ही विस्तृत व्यवस्थित विवेचना के रूप में नहीं।

यूरोपीय इतिहासकारों ने उन्नीसवीं शताब्दी के अन्तिम चरण से समकालीन सामाजिक और राजनीतिक अवधारणाओं का ही इतिहास में प्रस्फुटन देखने का प्रयास किया। भारतीय इतिहास-संरचना में भी इन उदाहरणों का अनुकरण हुआ। भारत में इतिहास-शास्त्र यूरोप से कई दशक पीछे रहा है। इधर संपर्कों की सरलता के चलते यूरोप में इतिहास-रचना की प्रक्रिया भारत को शीघ्र ही प्रभावित कर देती है। यूरोप का यह प्रभाव भारतीय इतिहास के क्षेत्र में नए प्रकरणों का प्रवेश कराता है, किन्तु यह अपने में पर्याप्त नहीं है।

सभी इतिहास समकालीन इतिहास होता है, प्रत्येक पीढ़ी अपने लिए नया इतिहास लिखती है, इत्यादि कथन इतिहास की व्याख्या के लिए मार्गनिर्देश करते हैं। इतिहास अतीत के तथ्यों की सार्थक प्रस्तुति है। सार्थकता उन प्रश्नों से उत्पन्न होती है जिन्हें इतिहासकार उभारता है। ये प्रश्न इतिहासकार के अपने काल में चर्चित प्रकरणों के लिए प्रासंगिक होने से अर्थपूर्ण बनते हैं। इतिहासकार अतीत को इन्हीं प्रश्नों की दृष्टि से देखता है।

समकालीन लोगों के लिए प्रासंगिक होकर ही इतिहास अपनी उपयोगिता और आकर्षण बनाए रख सकता है। सम्प्रति भारत के सम्मुख कई समस्यायें हैं। इनमें से कुछ पूर्वकाल से ही चली आई हैं, कुछ ने अपना बृहत् आकार अब प्राप्त किया है। इन मुद्दों की दृष्टि से इतिहास का अध्ययन इनके स्वरूप को समझने और इनके प्रति स्वस्थ दृष्टिकोण बनाने में सहायक होगा।

इनमें से एक समस्या राष्ट्रीय एकता और एकीकरण की है। पहले कुछ इतिहासकारों ने भारत की मूलभूत एकता को उजागर किया था। प्रादेशिक पृथकता की आवाज को शान्त करने में भौगोलिक और सांस्कृतिक एकता के लक्षण सहायक हो सकते हैं। किन्तु यह पर्याप्त नहीं है। वर्तमान की वास्तविकता को पहचान करके ही इतिहास की सहायता से उसके प्रति यथार्थवादी स्वस्थ दृष्टिकोण अपनाया जा सकता है। एकीकरण की स्वाभाविक और सहज गति और उसमें बाधक कारकों का ऐतिहासिक विवेचन इस सन्दर्भ में अपेक्षित है।

आधुनिक भारत ने कुछ मूल्यों को अपनी आधारशिला के रूप में स्वीकार किया है। वह प्रजातंत्र, समाजवाद, और धर्मनिरपेक्षता के आदर्शों के लिए प्रतिज्ञाबद्ध है। कुछ ऐसे वर्ग और व्यक्ति हैं जो अपने व्यवहार से इन सिद्धान्तों के प्रभाव को शिथिल बनाते हैं। भारतीय इतिहास की समुचित व्याख्या इन आदर्शों को समर्थन और शक्ति देने में समर्थ होगी।

प्राचीन भारतीय गणराज्यों का अध्ययन वर्तमान में मनोवैज्ञानिक सन्तोष प्रदान कर सकता है और उसके अनुभव उपयोगी सिद्ध हो सकते हैं। किन्तु इससे भी अधिक प्रासंगिक यह होगा कि सामाजिक, आर्थिक, धार्मिक और राजनीतिक आदि जीवन के विभिन्न क्षेत्रों में प्रजातांत्रिक प्रवृत्तियों और व्यवस्थाओं का अध्ययन हो। इन पक्षों पर किये गये अध्ययन प्रायः प्राचीन काल तक ही सीमित रहे हैं। यद्यपि उन्नीसवी शताब्दी के अंग्रेज प्रशासक इनकी प्रजातांत्रिक कार्यशैली की प्रशंसा में मुखर थे, इतिहासकारों ने इनके परवर्ती इतिहास पर ध्यान नहीं दिया है।

भारतीय सामाजिक व्यवस्था की कुछ विकृतियों के चलते उसके विषय में विद्वानों की जो मान्यतायें बनी हैं उसके कारण समाजवादी विचार और व्यवहार की दृष्टि से इतिहास की व्याख्या की ओर ध्यान नहीं जा सका है। सामाजिक विषमताओं के विरुद्ध आवाजें उठाई गई हैं और अशक्त और पीड़ित के साथ न्याय के लिए प्रयास हुए हैं। धार्मिक आन्दोलनों के सामाजिक पक्ष की विवेचना से हमें समाजवादी विशेषताओं वाले चिन्तन का निरन्तर प्रवाह मिलता है। यह स्पष्ट है कि औद्योगीकरण से पूर्व के काल में परिस्थितियाँ पूर्ण समाजवादी चिन्तन का स्पष्ट और विकसित रूप नहीं प्रस्तुत कर सकतीं।

पाश्चात्य परिप्रेक्ष्य की सेक्यूलरिज़्म की अवधारणा भारतीय सन्दर्भ में धर्मनिरपेक्षता में अनुवादित होकर धर्म समभाव के आदर्श में परिणत हुई है। यह एक शर्मनाक सत्य है कि कुछ निहित स्वार्थ वाले तत्व निर्लज्ज होकर साधारण अवसरों का भी उपयोग साम्प्रदायिक वैमनस्य और अशांति की आग को फैलाने के लिए करने से नहीं चूकते। कुछ इतिहासकार इस सन्दर्भ में यह सिद्ध करना चाहते हैं कि ऐसे संघर्ष प्राचीन काल में भी होते थे। यह तर्क युक्तिपूर्ण नहीं है और भयंकर उदाहरणों का पोषक बनेगा। किसी भी काल की साम्प्रदायिक हिंसा और उत्पीड़न प्रशंसित नहीं हो सकते। आवश्यकता यह है कि सभी धर्मों और सम्प्रदायों में मूलभूत समरसता के संवर्धन के वैचारिक प्रयासों का इतिहास निरूपित हो। धार्मिक संघर्ष और उत्पीड़न के पूर्वकालीन उदाहरण सदा ही धार्मिक विरोध के कारण उत्पन्न नहीं हुए थे, अपितु राजनीतिक प्रतिद्वंदिता और आर्थिक लोभ से प्रेरित थे। सबसे महत्वपूर्ण बात यह है कि भारतीय इतिहास में परस्पर सांस्कृतिक लेन-देन और सामंजस्य की शान्त प्रवृत्ति स्पष्ट उभरती है। साधारण जन ने अपने उदार दृष्टिकोण और भ्रातृ-भाव के व्यवहार से इन्द्रधनुषी सांस्कृतिक सौहार्द और मिलन की संरचना की।

एक दूसरा प्रकरण जिसे इतिहास के पृष्ठों में खोजना है वह है विकास की प्रवृत्ति। कृषि-प्रधान भारतीय समाज आर्थिक प्रगति और तकनीकी परिवर्तनों को स्वीकार नहीं करेगा इसके पक्ष में दो कारक सक्रिय हैं। एक तो रूढ़िवादी परम्परावादी दृष्टिकोण है जो परिवर्तन के किसी भी विचार का विरोध करता है। दूसरा है पाश्चात्य विद्वानों द्वारा भारतीय संस्कृति पर आरोपित संन्यास का आवरण। इन दोनों ही कारकों की चुनौती का सामना इतिहास की सही प्रस्तुति के द्वारा किया जा सकता है। रूढ़िवादी विचारधारा का उत्तर है वैज्ञानिक दृष्टिकोण की संपुष्टि। विज्ञान के विभिन्न क्षेत्रों में उल्लेखनीय प्रगति से स्पष्ट है कि भारत परिवर्तन का विरोधी नहीं रहा है। दर्शन ही नहीं ज्ञान के विभिन्न क्षेत्रों में श्रुति और आप्त-वचन के लिए पूरी श्रद्धा के होते हुए भी तर्क को गौरव देना इतिहास के द्वारा विवेचित होना चाहिए। इसी प्रकार भारतीय संस्कृति को संन्यासवादी कहना इतिहास से समर्थित नहीं होगा। भारतीय संस्कृति धर्मप्रधान अवश्य रही है, किन्तु धार्मिकता जीवन से पलायन का पर्याय नहीं है। भारतीय संस्कृति संतुलन की संस्कृति रही है। इसने भौतिक प्रगति और सुख के लिए प्रयास को भी समुचित महत्व दिया है। इस व्यावहारिक दृष्टिकोण की ऐतिहासिक

व्याख्या भारत की प्रगति की योजनाओं का सबल समर्थन करेगी।

यह दावा नहीं किया जा सकता कि भारतीय इतिहास की सभी समस्याओं का विवेचन और हल प्रस्तुत हो गया है। हम विश्वास के साथ किसी एक व्याख्या को सर्वथा अनुकरणीय नहीं कह सकते। फिर भी हम अपने विवेचन के आधार पर कुछ मार्गनिर्देश अपना सकते हैं।

हम प्रारूपों को स्वीकार कर सकते हैं, किन्तु हमें उनकी सत्यता का परीक्षण करना चाहिए, न कि उसे सिद्ध करने का प्रयास। प्रारूपों की उपयोगिता यह है कि वे हमें व्याख्या के लिए प्रकरण और दृष्टिकोण देते हैं। प्रकरणों की समकालीन प्रासंगिकता होनी चाहिए। प्रकरण व्यापक कालक्रम में घटित हों। उन्हें यथासम्भव भारतीय इतिहास की सम्पूर्णता में देखना है। समाज के किसी एक पक्ष की व्याख्या को सम्पूर्ण पक्षों के सन्दर्भ में ही विवेचित करना है। किन्तु सबसे अधिक महत्व की बात यह है कि व्याख्या तथ्यों पर ही आधारित हो। तथ्यों को दबाना या आंशिक तथ्यों पर ही व्याख्या की स्थापना सदैव आलोच्य होगी। प्रकरण के लिए अपेक्षित तथ्य यदि प्राप्य नहीं है तो व्याख्या उनके संकलन तक प्रतीक्षा करे।

वह कार्य दुष्कर है, विशेष रूप से साधारण जन की उससे अपेक्षा के कारण। चुनौतीपूर्ण यह कार्य वस्तुनिष्ठा और प्रामाणिकता के साथ संपादित होना है, क्योंकि वर्तमान और भविष्य दोनों के लिए इसका महत्व है।

प्रो० लल्लनजी गोपाल
प्राचीन भारतीय इतिहास, संस्कृति एवं पुरातत्व विभाग,
काशी हिन्दू विश्वविद्यालय, वाराणसी- 221 005

काटर-उमरगढ़ के बौद्ध स्तूप के अवशेष

राकेश तिवारी,
राकेश कुमार श्रीवास्तव

यमुना नदी के बाँयें किनारे के बीहड़ों में स्थित 'काटर-गाँव' और 'उमरगढ़' नामक स्थल से हाल ही में प्राचीन बौद्ध स्तूप के तोरण द्वार और वेदिका के दुर्लभ अवशेष प्रकाश में आये हैं। ये स्थल कानपुर देहात जिले की घाटमपुर तहसील की सीमा में आते हैं।

जिला मुख्यालय कानपुर और तहसील मुख्यालय घाटमपुर से "**काटर गाँव**" की दूसरी क्रमशः 68 कि०मी० और 28 कि०मी० है। घाटमपुर से भोगिनीपुर जाने वाले मोटर-मार्ग पर, मूसानगर से लगभग 3 कि०मी० पहले, दक्षिण दिशा में एक उपमार्ग जाता है। इस मार्ग से लगभग 10 कि०मी० चलकर काटर गाँव (अक्षांश 26° 7′ 30″ उ०, देशान्तर 79° 58′ 20″ पू०) पहुँचते हैं। यहाँ जाने के लिए सबस उपयुक्त साधन जीप है, किन्तु वह भी गाँव से लगभग आधा कि०मी० पहले तक पहुँचा सकती है। उसके आगे पैदल मार्ग से ही जाना पड़ता है। मूसानगर अथवा मुक्तानगर के नाम से सुज्ञात पुरास्थल यहाँ से लगभग 6 कि०मी० उत्तर–पश्चिम दिशा में स्थित है।

गाँव वाले बताते हैं कि जिस जगह पर प्रश्नगत पुरावशेष मिले हैं। वहाँ रखे प्रस्तर-खण्डों को वे लम्बे समय से पूजते चले आ रहे हैं। इनके पास ही जमीन से बाहर निकले हुए पत्थर दिखते थे। लोग कहते कि यह किसी खजाने के दबे होने के निशान है। एक रात कथित खजाने की खोज में किसी ने वहाँ खुदाई की लेकिन खजाने की जगह पत्थर के खम्भे आदि निकलने पर उन्हें स्वाभाविक निराशा हुई, इसलिए वे उन्हें यथास्थित छोड़कर चले गये। दूसरे दिन जब लोगों ने यह सब देखा तो इलाके के थानेदार और पुरातत्व संगठन को इसकी सूचना दी। इन पुरावशेषों में एक स्तम्भ पर शेर की मूर्तियाँ देखकर स्थानीय जिज्ञासुओं ने इन्हें "अशोक की लाट" समझा[1]।

काटर गाँव में प्राचीन अवशेष मिलने की सूचना पाकर उ० प्र० राज्य पुरातत्व संगठन द्वारा इनका निरीक्षण और अभिलेखीकरण कराया गया। लगभग आधा कि०मी० उत्तर दिशा में स्थित इनका प्राप्ति-स्थल 'देवलिया डांण' अथवा 'देवलिया बाबा का टीला' कहलाता है। टीले के ऊपर एक खम्भा गाड़ कर उससे एक झण्डा बांध दिया गया है, जो आस-पास के इलाके में दूर से दिखाई देता है। इस खम्भे के निचले पार्श्व में कुछ पुरावशेष रखे हैं। गाँव वाले इन्हें देवस्वरूप मानकर इनकी पूजा करते हैं। उनका विश्वास है कि इन्हें वहाँ से हटाने वाले पर दैवी आपदा टूट पड़ेगी।

टीले के पास एक नाला बहता है, जो अन्त में यमुना नदी में मिल जाता है। इसे स्थानीय लोग "ढेढुआ नाला" कहते हैं। टीले पर ढलाव की ओर तथा नाले के कटाव में प्राचीन ईंटों की कुछ वास्तु-संरचनाएँ दिखाई देती हैं। ऐसा लगता है कि नाले के कटाव से यह पूरा क्षेत्र क्रमशः छोटे-छोटे टीलों में परिवर्तित हो गया है जिन पर काटेदार झाड़ियाँ उगी हुई हैं।

"देवलिया डांण" से प्रकाश में आये पुरावशेषों में चित्तीदार लाल बलुए पत्थर के दो स्तम्भ, 6 चौकोर अलंकृत प्रस्तर-खण्ड और एक कँगूरा उल्लेखनीय हैं। इनमें **शीर्ष पर बैठे हुए दो सिंहों से युक्त स्तम्भ** सबसे अधिक आकर्षक हैं (चित्र सं० 1)। इस स्तम्भ की कुल ऊँचाई 4.55 मीटर तथा चौड़ाई 0.35 मीटर है। इसका चतुष्कोणीय निचला भाग कदाचित भूमि में दबा रहा होगा। उसके ऊपर के हिस्से को मुख्यतः तीन उपभागों में बाँटा जा सकता है, निचला भाग चौकोर और मध्यांश दो अष्टकोणीय (अट्ठांसिका) उपस्तम्भों से युक्त है।

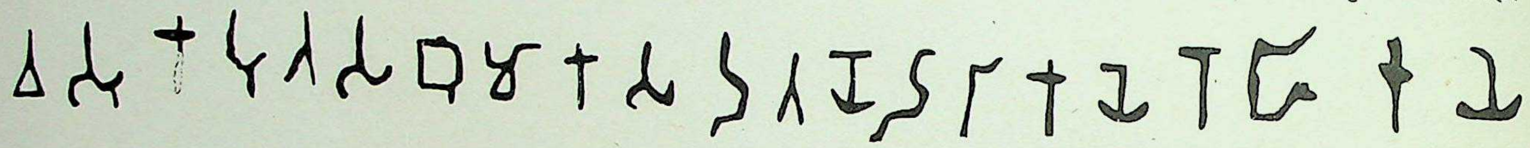
स्तम्भ-शीर्ष के दृश्य पार्श्व पर सबसे नीचे की ओर पुष्प-पट्टिका की आधार पीठिका के ऊपर घंटिकाकार संरचना, वलयित रज्जु और पुष्प-पट्टी का निरूपण कर उसके ऊपर एक सादी चौकी बनायी गयी है (चित्र सं०–2)। इसके ऊपर परस्पर विपरीत दिशाओं में बैठे हुए सिंह विराजमान हैं। इनकी देहयष्टि, घने और गुच्छेदार अयाल आदि का उत्कृष्ट रूपांकन किया गया है। उनके ऊपर की छः पट्टिकाएँ अर्द्धपुष्प, मनकों और चतुर्दल पुष्प (चौफुलियां) की पंक्ति से सुसज्जित हैं। स्तम्भ के पिछले पार्श्व की आकृतियाँ मिट्टी में दबे होने के कारण दिखाई नहीं पड़ती हैं। कदाचित् उस ओर भी उपरोक्तानुसार दो पशु-आकृतियाँ निरूपित की गयी हैं।

टीले के सबसे ऊपरी भाग में गड़ा हुआ दूसरा स्तम्भ, जो वर्तमान समय में ध्वज-स्तम्भ के रूप में प्रयोग किया जा रहा है, उपर्युक्त स्तम्भ के शीर्ष पर जुड़ा रहा होगा, क्योंकि इसका आकार उक्त स्तम्भ के शीर्ष के ऊपर निकले हुए भव्य भाग के समरूप है। इस पर किसी प्रकार का अलंकरण नहीं किया गया है।

चौकोर अलंकृत प्रस्तर-खण्ड वस्तुतः ऊपर उल्लिखित पहले स्तम्भ के साथ ही पाये गये थे, जिन्हें गाँव वालों ने मिट्टी से बाहर निकाल कर एक दूसरे के ऊपर सजा कर रख दिया है (चित्र सं०- 3) इनके ऊपर एक ध्वजयुक्त डण्डा लगा दिया गया है।

पीठिका के ऊपर अत्यन्त सुन्दर फुल्ल-पद्म निरूपित है। इसके कमल-गट्टों से युक्त कुक्षि, पुंकेसर एवं पंखुड़ियों की गढ़न उत्कृष्ट शिल्प कला की परिचायक है। इसके ऊपर एक सुसज्जित पट्टिका बनाकर बाह्य आवृत्त में ऐसी लहरदार गढ़नें गढ़ी गयी हैं जिनके शीर्ष अन्दर की ओर इस तरह घुमाव ले रहे हैं मानों फन निकाले हुए नाग हों। कदाचित् इसी कारण इस गढ़न को कुछ विद्वानों ने नागपुष्प नाम दिया है[2]। सामान्यतः इस अभिप्राय का उल्लेख "हनी सकल" के नाम से किया गया है[3] इसके शीर्ष भाग पर एक चक्र शोभायमान है। कंगूरे की कुल चौड़ाई 56 से०मी० तथा अवशिष्ट भाग की ऊँचाई 68 से०मी० है।

कंगूरे की आधार पीठिका पर उत्कीर्ण **अभिलेख** में कुल 21 अक्षर हैं।



प्रत्येक प्रस्तर-खण्ड 33 से०मी० चौड़ा व 40 से०मी० ऊँचा है। भीतर से काटकर इन्हें इस प्रकार खोखला बनाया गया है कि वे किसी स्तम्भ में फंसाए जा सकें। उभय पार्श्वों पर एक ही प्रकार के प्रतीकों के अंकन से युक्त ये प्रस्तर-खण्ड तीन युगलों में वर्गीकृत किये जा सकते हैं। इन पर निरूपित अभिप्रायः निम्नवत् है:–

1- **स्तूप**

2- **चूड़ा महा**

3- **त्रिरत्न और बोधि वृक्ष युक्त चैत्य**

पहले प्रकार के अभिप्राय में सूची और दण्ड युक्त महा वेदिका, अण्ड लघु वेदिका, मेधि और हर्मिका व उसके ऊपर छत्रों का सुपष्ट निरूपण किया गया है। इन पर स्वास्तिक, पंचांगुलिक और पुष्पावली तथा हर्मिका के पार्श्वों में फुल्ल पद्म जैसे मांगलिक चिन्ह प्रदर्शित हैं।

चूड़ामहा अभिप्राय में प्रदर्शित एक चैत्य के सुसज्जित प्रवेश द्वार के ऊपर से दूसरे आवृत्त को 'हनी सकल' गढ़न से सज्जित किया गया है। द्वार के पार्श्व भागों में लहरदार सिलवटों से युक्त पट बंधे हुए हैं। शीर्ष भाग वलभी मंदिरों के शिखर की तरह गोलाकार प्रतीत होता है। इनके भीतर की ओर भगवान बुद्ध के केश और पगड़ी का प्रतीक "**चूड़ा**" प्रदर्शित है।

तीसरे प्रकार के प्रस्तर-खण्डों पर चैत्य के गर्भगृह में "**त्रिरत्न**" और पृष्ठ भाग में ऊपर की ओर निकला हुआ बोधिवृक्ष का सुगढ़ रूपांकन दृष्टव्य है।

पूर्वोल्लिखित सिंह-शीर्ष युक्त स्तम्भ के पार्श्व में एक भग्न **कंगूरा** पड़ा हुआ है (चित्र सं०– 4)। इसके अनेक भग्नांश भी उसी स्थान पर रखे हुए हैं। गाँव वाले इन्हीं की पूजा देवता के रूप में करते हैं। उनके कथनानुसार यह कंगूरा कुछ समय पूर्व तक अपने पूर्ण आकार में सुरक्षित था, कालान्तर में लोगों ने इसे लाठी, कुल्हाड़ी मारकर तोड़ डाला।

कंगूरे के निचले भाग में, किसी आधार पर बने हुए छिद्र में, फंसाने के लिए नीचे की ओर निकली हुई चौकोर संरचना (चूड़ा) का प्राविधान किया गया है। इसकी आधार पीठिका के बाँयें पार्श्व का कुछ भाग खण्डित है जिस पर उत्कीर्ण तीन अक्षरों में से तीसरा अंशतः भग्न हो चुका है। दायें भाग पर 18 अक्षर उकेरित हैं।

इनमें पट्टिका के बाँयें पार्श्व के टूटे हुए भाग पर अंकित तीन अक्षर भी सम्मिलित हैं। अक्षरों की अधिकतम् ऊँचाई 3.5 से०मी० है। सभी अक्षर एकल हैं। संयुक्ताक्षरों का प्रयोग नहीं किया गया है। इनका पाठ निम्नवत् है।

वसुक पुतस बुमाकस द.(ु) (ि) तये दारिकये रेहिक (ा) ये

अर्थात

[यह तोरण] वसुक के पुत्र बुमाक की द्वितीय पुत्री रेहिका का [दान है]

इस अभिलेख की लिपि ब्राह्मी और भाषा पाली है। इसमें वर्णमाला के 11 अक्षरों का प्रयोग किया गया है।

"**क**" अक्षर की खड़ी रेखा को काटती हुई पड़ी रेखा उसके मध्य भाग से कुछ ऊपर हटकर लगायी गयी है। अशोक कालीन लेखों में ये रेखाएँ एक दूसरे को सामान्यतः मध्य में काटती हैं। बाद के लेखों में पड़ी रेखा थोड़ा और ऊपर की ओर खिसक कर गुप्तकाल में अर्द्धवृत्ताकार हो जाती है। कुषाण काल में खड़ी रेखा की लम्बाई अशोक कालीन लेखों की अपेक्षा कम हो जाती है, जबकि प्रश्नगत अभिलेख के "क" अक्षरों में यह रेखा अपेक्षाकृत लम्बी है।

"**त**" अक्षर का प्रयोग इस अभिलेख में दो बार किया गया है। पहली बार दाँयीं ओर की तिरछी रेखा खींचकर उसके निचले बाँयें पार्श्व में एक छोटी रेखा जोड़ी गयी प्रतीत होती है, जबकि दूसरे उदाहरण में निचले भाग की दोनों रेखायें परस्पर मिली हुई और ऊपर की रेखा अलग से जोड़ी गयी लगती है।

"**द**" वर्ण का प्रयोग दो बार किया गया है। इसमें दायें पार्श्व में ऊपर और नीचे की रेखाओं को जोड़ता हुआ अर्द्धवृत्ताकार भाग कोणीय होने लगता है। अशोक के अभिलेखों गें इस अक्षर के ये भाग लगभग अर्द्धचाप बनाते हैं।

"**प**" अक्षर का उल्लेख इस अभिलेख में एक बार "पुतस" शब्द के साथ किया गया है। अशोक कालीन अभिलेखों में "प" अक्षर को लगभग इसी प्रकार उत्कीर्ण किया गया है जैसा कि प्रस्तुत अभिलेख में है। अर्थात

इस अभिलेख के उत्कीर्ण किये जाने वाले काल में "प" शब्द के स्वरूप में परिवर्तन नहीं दिखाई देता है।

"**ब**" अक्षर का प्रयोग इस लेख में एक बार किया गया है। उसका आकार अशोक कालीन अभिलेखों में वर्गाकार दर्शाया गया है। अशोक कालीन लिपि के समान ही इस लेख में भी "ब" शब्द का प्रयोग दिया गया है। इस प्रकार "ब" के स्वरूप में कोई परिवर्तन नहीं दृष्टिगत होता है।

"**म**" शब्द के नीचे का भाग अशोक कालीन लेखों में पूरा वृत्ताकार निर्मित करने की परम्परा रही है परन्तु कुछ बाद के अभिलेखों में इसके नीचे का भाग कुछ कोणात्मक दर्शाया गया है। इस लेख में भी "म" शब्द के नीचे का भाग पूर्ण वृत्ताकार न होकर थोड़ा कोणीय निर्मित किया गया है।

"**य**" वर्ण का प्रयोग मौर्य कालीन ब्राह्मी लिपि में लगभग उस लेख में उत्कीर्ण लिपि के अनुसार ही किया जाता था। इस लेख में "य" अक्षर का प्रयोग दो बार किया गया है। प्रथम उदाहरण में नीचे का भाग पूरी तौर पर अर्द्धचाप नहीं बनाता है जबकि दूसरे उदाहरण में नीचे का भाग पूर्णतया अर्द्धचाप बनाता हुआ प्रतीत होता है।

"**र**" अक्षर का प्रयोग इस लेख में दो बार किया गया है। "र" का स्वरूप अशोक कालीन अभिलेखों में उल्लिखित स्वरूप के समान ही दर्शाया गया है। उस प्रकार "र" के स्वरूप में इस समय तक कोई परिवर्तन नहीं दिखाई पड़ता है।

"**व**" अक्षर का प्रयोग इस अभिलेख में कुल एक बार किया गया है। अशोक कालीन अभिलेखों में जहाँ "व" के ऊपरी भाग को एक खड़ी लकीर द्वारा तथा नीचे के भाग को पूर्ण वृत्त द्वारा दर्शाया गया है वहीं उस लेख में उसके ऊपर का भाग तो खड़ी लकीर से दर्शाया गया है परन्तु नीचे का भाग वृत्त के स्थान पर त्रिभुज के रूप में दर्शाया गया है।

"**स**" शब्द का प्रयोग इस अभिलेख में कुल दो बार किया गया है। अशोक के अभिलेखों के समान ही "स" वर्ण को इस लेख में उत्कीर्ण किया गया है, उसके स्वरूप में कोई परिवर्तन नहीं दिखाई पड़ता है।

"**ह**" वर्ण के सम्बन्ध में उल्लेखनीय है कि अशोक कालीन अभिलेखों में उसका निचला भाग जहाँ वृत्ताकार होता था उसके कुछ समय बाद यह भाग थोड़ा कोणीय बनने लगा। इस प्रकार यह पूर्ण अशोक कालीन लिपि के स्वरूप से साम्य रखते हुए भी थोड़ा भिन्न है। इस लेख में "ह" वर्ण का निचला भाग वृत्ताकार के स्थान पर थोड़ा कोणात्मक है।

अतः सामान्य रूप में जिन वर्णों में घुमाव को अधिकतर वृत्ताकार दिखाने की परम्परा अशोक-कालीन लेखों में दिखाई देती है, वहीं इस लेख में उन्हीं वर्णों को थोड़ा कोणात्मक निर्मित किया गया है।

इस अभिलेख में आ, ई, उ, ए एवं ओ की मात्राओं का प्रयोग किया गया है। "**आ**" की मात्र समान रूप से अक्षर के ऊपरी भाग पर दाहिनी ओर एक पड़ी रेखा से दिखायी गयी है। इस मात्रा को इस तरह अंकित करने की यह परम्परा अशोक कालीन अभिलेखों के ही समान है।

"**इ**" अथवा "**ई**" की मात्रा अशोक कालीन अभिलेखों में पूरी तरह कोणात्मक (ㄴ) है। बाद के कालों में वूर्ण कोणिकता नहीं दिखती है। प्रश्नगत लेख में दो स्थानों पर "इ" की मात्रा का प्रयोग किया गया है तथा दोनों स्थानों पर बाद के प्रकार ही दिखते हैं।

"**ए**" की मात्रा भी सामान्यतः "आ" की मात्रा के समान दाँईं ओर की जगह बाँईं ओर अंकित की जाती है। प्रस्तुत अभिलेख में प्रयुक्त "ए" की मात्रा अशोक कालीन अभिलेखों की परम्परा के समान है।

"**ओ**" की मात्रा दर्शाने के लिए अशोक कालीन अभिलेखों में अक्षर के ऊपरी भाग पर दोनों ओर एक-एक पड़ी रेखायें अंकित की जाती हैं। यहाँ भी उसी परम्परा का पालन किया गया है।

"**उ**" की मात्रा अशोक कालीन अभिलेखों में अक्षर के नीचे खड़ी अथवा क्षैतिज दोनों प्रकार से लगायी जाती थी। इस अभिलेख में भी यहाँ पर "उ" की मात्रा (बुमाक में) "ब" के नीचे एक सीधी रेखा के द्वारा प्रदर्शित की गयी है।

इस अभिलेख में उल्लिखित "बुमाक" और "रेहिका" के नाम आर्य अथवा संस्कृत व्युत्पत्ति के नहीं प्रतीत होते हैं। कदाचित से किसी जनजाति से सम्बन्धित हैं।

II

अभी हम काटर गाँव के पुरावशेषों का मूल्यांकन ही कर रहे थे कि मूसानगर के टीले पर नियुक्त चौकीदार के पत्र से यह सूचना प्राप्त हुई कि मूसानगर के पास "**उमरगढ़ के टीले**" पर भी काटर जैसी "अशोक की लाट" पड़ी हुई है। यह स्थान मूसानगर से लगभग 2 कि०मी० दक्षिण-पूर्व दिशा में चन्दनापुर ग्राम के पास स्थित है (अक्षांस 26° 9′ 20″ उ०; देशान्तर 79° 57′ 50″ पूर्व) इसके दक्षिण पश्चिम में स्थित काटर ग्राम यहाँ से लगभग चार कि०मी० दूर है।

उमरगढ़ के टीले के ऊपर खेतों में एक **स्तम्भ शीर्ष** और 3 खण्डित प्रस्तर-स्तम्भ पड़े हुए हैं। इनके गढ़न के लिए भी चित्तीदार लाल बलुए पत्थर का प्रयोग किया गया है। खुले में पड़े रहने के कारण वातावरण और मिट्टी के प्रभाव से स्तम्भ शीर्ष का एक पृष्ठ मटमैला और मिट्टी में दबा हुआ दूसरा चिकना हो गया है। इसकी ऊँचाई 83 से०मी०,चौड़ाई 41 से०मी० और मोटाई 33 से०मी० है।

पहले पार्श्व की चौकी के नीचे की अलंकृत पट्टी से नीचे का भाग भग्न हो चुका है (चित्र सं० 5)। चौकी पर एक दूसरे से विपरीत दिशा में मुख करके बैठे हुए वृष-संघाट प्रदर्शित हैं। इनका मुख भाग मानव मुख से मिलता-जुलता है। कान छोटे और सींघ अन्दर की ओर वर्तुलाकार मुड़ी हुई है। देह यष्टि-पुष्ट, गरदन अपेक्षाकृत मोटी और पैरों के खुर की सुगढ़ता दर्शनीय है। इन पशुओं के मध्य एक पद्मपुष्प दर्शाया गया है। इसके ऊपर एक सादी पट्टी छोड़कर पद्मपत्र,मनकावलि, चतुर्दल पुष्प और ज्यामितिक सज़्जाएँ उकेरित हैं।

स्तम्भ शीर्ष के दूसरी ओर चौकी से नीचे पुष्पालंकृत पट्टिका के नीचे अवेष्ठित रज्जु और उसके नीचे की घण्टिकाकृति आकृति पर पद्म पत्र से सज्जित गढ़न दिखती है (चित्र सं० 6)। घण्टिकाकृति का केवल ऊपरी भाग ही अवशिष्ट है। चौकी का बाँया भाग भग्न हो चुका है। इसके ऊपर पहले पार्श्व पर प्रदर्शित पूर्वोल्लिखित पशुओं जैसी प्रतिमाएँ निरूपित हैं। इनके ऊपर के अलंकरणों में पुष्पावलि की भिन्न शैली के अतिरिक्त कोई विशेष अन्तर नहीं है।

उपर्युक्त **स्तम्भ शीर्ष** के पास ही पड़े हुए एक प्रस्तर-खण्ड पर भी मनकों, और चतुर्दल पुष्पों की पंक्तियों की सज्जा दिखती है जिससे ऐसा

लगता है कि यह भी किसी स्तम्भ-शीर्ष का विखंडित अंश है।

यहाँ मिला अन्य प्रस्तर-खण्ड **वेदिका-स्तम्भ** प्रतीत होता है (चित्र सं०-7-8)। इनके ऊपरी ओर निचले चतुष्कोणीय भागों के मध्य अष्टकोणिक अन्तर-पट्टिका है। इनके पार्श्वों को वृत्ताकार बना कर उन पर पूर्ण पुष्पित "पदुमक" निरूपित किये गये हैं। वृत्तों के कोने अर्द्धपुष्पित कलिकाओं से सज्जित हैं। इस स्तम्भ की माप 60×20 से०मी० है।

III

"देवलिया डांण" और "उमरगढ़" के टीले से प्रकाश में आये पुरावशेषों के मूल्यांकन के सन्दर्भ में **मूसानगर** की प्राचीनता और महत्व का उल्लेख करना समीचीन होगा। यमुना नदी के बायें तट पर ही स्थित इस स्थल (अक्षांस 26° 9′ 40″ उत्तर, देशान्तर 79° 57′ 20″ पूर्व) के नाम की व्युत्पत्ति का ज्ञान नहीं हो सका है। यहाँ का टीला लगभग 4-5 कि०मी० के क्षेत्र में विस्तृत है।

यमुना की धारा ने इसके दाँयें किनारे को काट कर कगार में एक ऐसा प्राकृतिक "सेक्शन" बना दिया है, जिसमें "वलय कूप" (रिंग वेल) और इष्टिका निर्मित वास्तु-संरचनाएँ दिखती हैं। पूर्वोल्लिखित चन्दनापुर स्थित उमरगढ़ भी इसी टीले की परिधि में आता है।

इसके पश्चिमी भाग की सीमा बनाती हुई सेंगर नदी केवटपुर के निकट यमुना में मिल जाती है। मूसानगर के पूर्व सर्वेक्षणों के अन्तर्गत एक प्रस्तर निर्मित कुल्हाड़ी,[4] चित्रित धूसर मृणपात्रों (पी० जी० डब्लू०)[5] उत्तरी कृष्ण लोहित पात्रों (एन० बी० पी०),[6] और शुंग, कुषाण[7] व उनके उत्तरकालीन पुरावशेष बड़ी संख्या में पाये गये हैं। यहाँ से मिली एक मुद्राछाप यहाँ विशेष रूप से उल्लेखनीय है। इसकी विशेषता यह है कि इसे ठप्पा लगाकर नहीं वरन् लुढ़काकर बनाया गया है। ज्ञातव्य है कि सिन्धु सभ्यता और ऐतिहासिक काल में जो भारतीय मुहरें प्राप्त हुई हैं, उन्हें ठप्पा लगाकर ही प्रयोग किया जाता था। जबकि लुढ़का कर मुद्रा-छाप बनाने की विधा मेसोपोटामिया की प्राचीन सभ्यता में प्रचलित थी। इस आधार पर इसे ऐतिहासिक काल से पूर्व उत्तर सैन्धव काल का आंका गया है। साथ ही इसे विदेशी प्रभाव का द्योतक भी मानते हैं[8]। 1955-56 में कानपुर के जिलाधिकारी के प्रयत्नों से मूसानगर के अवशेषों के संग्रहीत किये जाने और उनमें से कुछ के राज्य संग्रहालय, लखनऊ में स्थानान्तरित होने का उल्लेख भी मिलता [9]। शेष पुरावशेषों-मण्मूर्तियाँ और प्रस्तर प्रतिमाएँ टीले पर स्थित मुक्तादेवी मन्दिर के एक कक्ष की दीवारों में जड़ी हुई हैं। इनमें से एक पूर्व कुषाण कालीन दुर्लभ शिव-प्रतिमा के विषय में पर्याप्त प्रकाशन उपलब्ध है[10]। इसके अतिरिक्त यहाँ की प्रमुख मूर्तियों का एक सूचीबद्ध सामान्य विवरण भी प्रकाशित हो चुका है[11]।

मुक्तादेवी मन्दिर के संग्रह में वेदिका-स्तम्भ, सूचियाँ, अत्यन्त सुन्दर शुंग एवं कुषाण मृण्मूर्तियाँ तथा कुषाण और मध्य कालीन प्रस्तर-प्रतिमाएँ सम्मिलित हैं। इस स्थल पर बौद्ध, शैव, वैष्णव, शाक्त और जैन (?) धर्मावलम्बियों की पूर्व-गतिविधियों का प्रमाण प्राप्त होता है। प्रश्नगत सन्दर्भ में वेदिका-स्तम्भ और सूचियाँ विशेष उल्लेखनीय हैं। स्तम्भों के पार्श्वों पर अर्द्धवृत्त, वृत्त और चौकोर "फ्रेम" में अर्द्ध पद्म व "पद्मक" सज्जाएँ निरूपित हैं। एक अष्टफलीय स्तम्भ के मध्य में एक वृत्त में प्रदर्शित दौड़ते हुए हाथी का कलात्मक प्रदर्शन दृष्टव्य है (चित्र सं०- 8) (60×25 से०मी०)। सूचियों पर विभिन्न प्रकार के पुष्पित पद्म-पुष्प और "हनी सकल" अभिप्रायः सुशोभित हैं (चित्र सं.- 9-10)। एक प्रस्तर-पट्ट पर पुरुषाकृति, एक अन्य स्तम्भ शीर्ष पर वृषारोही, मुक्तादेवी मन्दिर के पृष्ठ भाग की दीवार में जड़े प्रस्तर खण्ड पर यक्षाकृति और लखनऊ संग्रहालय में संग्रहीत स्तम्भ के उभय पक्षों पर यक्ष प्रतिमाओं का रूपांकन किया गया है[12]। मन्दिर के बाहर ध्वज स्तम्भों के रूप में प्रयोग किये जा रहे स्तम्भों के एक ओर ऊर्ध्वाधर छिद्र का होना, उनके तोरण द्वारों से सम्बद्ध होने की संभावना व्यक्त करते हैं। कदाचित् इन छिद्रों का प्राविधान बड़ेरों को फंसाने के लिये किया गया है। ये सभी अवशेष चित्तीदार लाल बलुए पत्थर से निर्मित हैं। शैलीगत विशेषताओं के आधार पर इन्हें लगभग दूसरी शती ई० से सम्बद्ध किया गया है[13]।

IV

काटर, चन्दनापुर और मूसानगर के पुरावशेषों के उपर्युक्त विवरण से सुस्पष्ट है कि ये बौद्ध स्तूप के तोरण द्वार और वेदिका के अवशेष हैं। काटर से मिला बैठे हुए सिंह से युक्त शीर्ष वाला स्तम्भ तोरण का पार्श्व स्तम्भ रहा होगा। इसके ऊपर कम से कम तीन बड़ेरे अवलंबित रही होंगी। इनके बीच-बीच में यहाँ रखे अलंकृत चौकोर प्रस्तर-खण्ड उसी प्रकार सुशोभित रहे होंगे, जैसे भरहुत और साँची के तोरण द्वारों पर पाये गये हैं[14]। पूर्ण पद्म, "हनी सकल" और चक्र से सज्जित कंगूरा तोरण के सबसे ऊपर मध्य में शोभायमान रहा होगा। उमरगढ़ के स्तम्भ-शीर्ष भी ऐसे ही किसी तोरण की शोभा बढ़ाते होंगे। अलंकृत स्तम्भ, सूचियों और यक्ष आदि से युक्त प्रस्तर-पट्ट स्तूप के चतुर्दिक बनी "पद्मवर वेदिका" को "शलाका वातायन" का स्वरूप प्रदान करते होंगे। वेदिका के एक तोरण का निर्माण, बुद्ध के प्रति श्रद्धावश, वसु के पुत्र बुमाक की द्वितीय पुत्री रेहिका के दान से कराया गया होगा। ऐसे ही अनेक श्रद्धालुओं ने इसके अन्य भागों का निर्माण कराकर बुद्ध के प्रति अपनी आस्था की अभिव्यक्ति करते हुए तत्कालीन कला की अमूल्य मंजूषाएँ यहाँ एकत्रित कर दी होंगी। इस प्रकार ये साक्ष्य इस स्थल के उत्कृष्ट कला और धर्म-केन्द्र रहे होने की प्रचुर संभावनाएँ प्रस्तुत करते हैं।

तोरण स्तम्भ, सिंह-संघाट, वृष, चौकोर प्रस्तर-खण्डों पर प्रदर्शित अभिप्रायों, कंगूरे, वेदिका स्तम्भों और पद्मक की शिल्प शैली तथा उनके लिये प्रयुक्त प्रस्तर आश्चर्यजनक रूप से मध्य प्रदेश के भरहुत स्तूप के तोरण द्वार और वेदिका के अवशेषों से समरूपता रखते हैं। इनमें इतनी अधिक समानता है कि यहाँ के स्तम्भ शीर्ष और कंगूरे के चित्र देखकर प्राचीन भारतीय कला के विद्वान भी अनायास ही इन्हें भरहुत स्तूप के अवशेष मान सकते हैं।

देवलिया डांण के कंगूरे पर उत्कीर्ण लेख के अक्षरों के विवरण से सुस्पष्ट है कि इनमें अशोक कालीन ब्राह्मी अक्षरों और उससे कुछ परिवर्ती लिपि की विशेषताएँ दिखती हैं, लेकिन शुंग काल के बाद के लक्षण इनमें नहीं मिलते हैं। इसलिए इसे प्रथम शती ई०पू० का माना जा सकता है। अतः यहाँ की कलाकृतियों के भरहुत स्तूप के तोरण आदि से तुलनात्मक साम्य तथा अभिलेख की विशिष्टताओं के आधार पर इन्हें लगभग प्रथम शती ई० पू० में रख सकते हैं। यही तिथि यहाँ के स्तूप की भी होनी चाहिए।

भरहुत और कौशाम्बी से मूसानगर की सीधी दूरियों में अधिक अन्तर नहीं है (मोटे तौर पर ये दूरियाँ 180 और 160 कि०मी० हैं)। भरहुत का संबंध कौशाम्बी के माध्यम से तो मूसानगर-काटर से रहा ही होगा। इनके बीच सीधा मार्ग भी रहे होने की पूर्ण सम्भावना है। जिस प्रकार मथुरा-विदिशा, उज्जैन होकर दक्षिण जाने वाले मार्ग पर 'सांची' तथा महाकोशल -कौशाम्बी- साकेत- श्रावस्ती और सोनघाटी होकर पाटलिपुत्र जाने वाले मार्ग पर 'भरहुत' को केन्द्र मानकर स्तूप निर्मित कराये गये। उसी प्रकार तक्षशिला - संघोल - मथुरा - कौशाम्बी - वाराणसी

होकर पाटलिपुत्र जाने वाले महा-पथ पर मूसानगर का भी चयन किया गया होगा।

पाटलिपुत्र से वाराणसी, कोसम, भरहुत के मध्य की दूरियाँ लगभग 150-200 कि०मी० के मध्य हैं। इस प्रकार इन मार्गों पर इतनी दूरी पर कोई न कोई महत्वपूर्ण नगर स्थित दिखता है। कौशाम्बी के बाद मथुरा की ओर लगभग इतनी ही दूरी पर स्थित मूसानगर स्वाभाविक रूप से व्यापारिक-मार्ग का अगला पड़ाव रहा होगा। यमुना और इस स्थल की विशिष्ट भौगोलिक स्थिति एक सुरक्षित राजनीतिक एवं सामरिक केन्द्र के लिये सर्वथा उपयुक्त है। कदाचित् इसी कारण प्राचीन काल से ही यहाँ आवासीय गतिविधियों के प्रमाण मिलते हैं। यहाँ से प्राप्त पूर्वोल्लिखित ओपदार प्रस्तर कुल्हाड़ी, मेसोपोटामिया की मुद्राछाप, चित्रित धूसर मृत्पात्र (पी०जी० डब्लू०), उत्तरी कृष्ण मार्जित पात्र (एन० बी० पी० डब्लू) और परवर्ती साक्ष्य इसकी पुष्टि करते हैं। दक्षिण, पूर्व, उत्तर और पश्चिम से आने वाले मार्गों के यहाँ से गुजरने के कारण यह एक व्यापारिक और धार्मिक केन्द्र भी रहा होगा। क्रमशः इसका महत्व इतना अधिक बढ़ गया होगा कि इसने एक बड़े नगर का रूप धारण कर लिया होगा। यहाँ का विस्तृत टीला इसका स्वतः साक्ष्य प्रस्तुत कर रहा है। इसके समकालीन समरूप नगर के इस क्षेत्र में रहे होने की संभावना नहीं दिखती है। यहाँ के वर्तमान टीले से बड़ा टीला अभी तक कानपुर जनपद से ज्ञात नहीं है[15] कदाचित् अपेक्षित एकान्त एवं शांति की दृष्टि से नगर से कुछ हटकर काटर गाँव के पास एक ऊँचे स्थान पर बौद्ध स्तूप और विहार का निर्माण कराया गया होगा। यहाँ आने वाले व्यापारियों और श्रद्धालुओं ने यथा-सामर्थ्य इसमें अपना योगदान किया होगा, जिनमें से "रेहिका" का नाम काटर गाँव के कंगूरे पर उत्कीर्ण अभिलेख में मिला है।

काटर से मिले पार्श्व स्तम्भ की ऊँचाई 4.55×0.34 से 0.36 से०मी० है जबकि भरहुत के ऐसे स्तम्भ 3.79 मीटर हैं। इससे सुस्पष्ट है कि यहाँ का स्तूप और तोरण भरहुत की अपेक्षा अधिक भव्य रहे होंगे। साँची की तरह इसका निर्माण भी ऐसे ऊँचे टीले पर कराया गया प्रतीत होता है, जहाँ स्थित स्तूप आस-पास के क्षेत्र में दिखकर श्रद्धालुओं को आकर्षित करता रहे।

काटर, चन्दनापुर और मूसानगर के तोरण-स्तम्भ, वेदिका-स्तम्भ और सूचियाँ इस स्तूप में लगे रहे होंगे। कालान्तर में इनमें से जितने अवशेष टीले पर पड़े रह गये उन्हें जिलाधिकारी कानपुर ने मुक्ता देवी मन्दिर में संग्रहीत कर दिया। भूमि में दबे रह गये अंश अब धीरे-धीरे प्रकाश में आ रहे हैं जिससे इस स्थल से ऐसे और अधिक अवशेष मिलने की पूरी सम्भावनाएँ प्रतीत होती हैं।

आभार

हम काटर गाँव के कंगूरे पर अभिलिखित लेख का पाठ उपलब्ध कराने और समुचित विचार-विमर्श हेतु प्रो० किरण कुमार थपल्याल, विभागाध्यक्ष, प्राचीन भारतीय इतिहास, संस्कृति एवं पुरातत्व विभाग, लखनऊ विश्वविद्यालय स्तरीय चित्र तैयार करके प्रस्तुत लेख की उपयोगिता बढ़ाने के लिये श्री राम गोपाल मिश्र, तथा उपर्युक्त पुरावशेषों की सूचना देने के लिए श्री शिवमंगल,स्मारक परिचर, मूसानगर,के हृदय से आभारी हैं।

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तीर्थावतार पट्ट के रूप में प्रयाग का अंकन

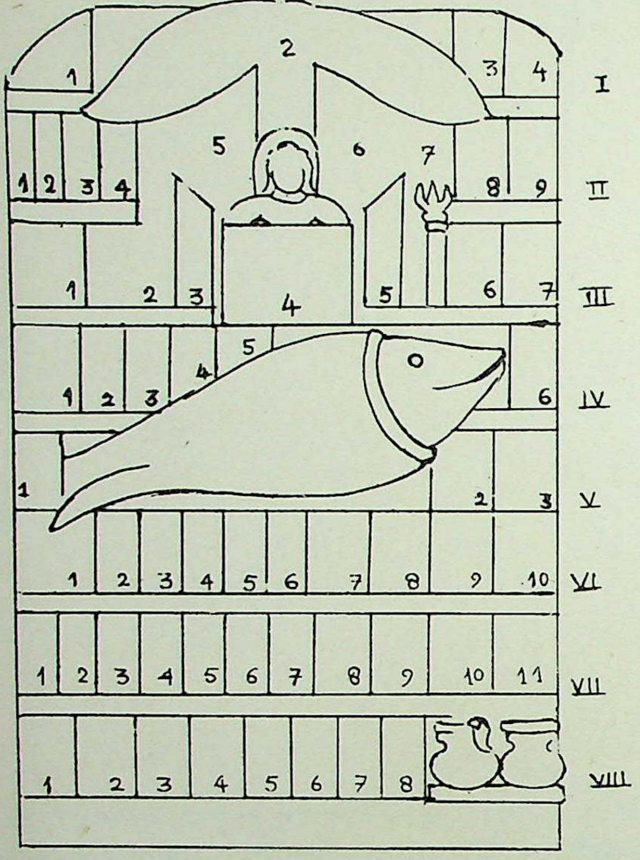
नीलकण्ठ पुरुषोत्तम जोशी

लन्दन के ब्रिटिश म्यूजियम में मध्य भारत से प्राप्त एक शिला फलक संग्रहीत है जो केवल अद्वितीय और अनोखा ही नहीं है अपितु 'तीर्थावतार पट्टों' की परम्परा का आरम्भिक स्वरूप भी है। साधारणतया यह जैन परम्परा मानी जाती है जो उत्तर मध्य काल में पट चित्रों के रूप में अधिक प्रचलित हुई पर मध्यकालीन कतिपय पाषाण पट्टों की समुचित पहचान के बाद यह कहा जा सकता है कि तीर्थों को उनके पौराणिक विवरणों के आधार पर शिलापट्टों के माध्यम से अंकित करने का मूल ब्राह्मण धर्मीय परम्परा में रहा है और उसका आरम्भ ईसवी सन की 9वीं शताब्दी में अवश्य ही हो गया था। इस विधान का मुख्य आधार लन्दन का पूर्व निर्देशित शिला पट्ट है। पहले इसका बहिरंग परीक्षण करना उचित होगा।

विचाराधीन शिलापट्ट की संग्रहालय पंजिका संख्या 1872.1.1.50 है (चित्र सं० 1 – 7)। यह पट्ट मोटे तौर पर चौकोर है, पर ऊपरी सिरा किंचित वर्तुलाकार है और इसके लिए हल्के पीले रंग का बलुआ पत्थर काम में लाया गया है। शिलापट्ट की ऊंचाई अनुमानतः एक मीटर के लगभग होगी। पट्ट के मध्य में दर्शक की दाहिनी ओर मुख किया हुआ एक विशाल मत्स्य बना है जिसकी पीठ पर एक पाँच मेखलाओं वाला स्थाण्डिल या चबूतरा है। इस चबूतरे पर जटा-जूट धारी पुरुष की आवक्ष प्रतिमा है जिसका दाहिना हाथ अभय मुद्रा में है और बायाँ हाथ छोटा सा घट लिये हुये है। पुरुष के केशविन्यास का अंकन, गले में पड़ी एकावलि आदि तो सुरक्षित है पर मुख का सम्मुख भाग खण्डित हो चुका है। इस पुरुष के मस्तक के पीछे शिवलिंग का ऊपरी भाग दिखलाई पड़ता है। यह लिंग हमें बतलाता है कि उसके सामने वाली पुरुष प्रतिमा शिव की आवक्ष मूर्ति है। स्थण्डिलारोपित शिव मूर्ति से युक्त यह शिवलिंग एक वृक्ष के नीचे प्रतिष्ठित है। लिंग के ऊपरी भाग के पीछे उभरने वाला वृक्ष का तना और उसके ऊपर का वृक्ष की शाखाओं का छायादार विस्तार भी प्रत्यक्ष है। यह वृक्ष वट वृक्ष से समानता रखता है, यद्यपि इसका अंकन कुछ अलंकारिक सा है। शिव युक्त स्थाण्डिल के अगल-बगल एक घटधारिणी स्त्री खड़ी है। लिंग और वृक्ष के दोनों ओर इन स्त्रियों की अपेक्षा आकार में कुछ बड़े एक-एक पुरुष की आकृति है। हमारे बाँयीं ओर के पुरुष के हाथ में माला तथा दूसरे के पास घड़ा है। बाँयीं ओर की घटधारिणी के पीछे एक विशाल त्रिशूल गड़ा है। लिंग के पीछे वाले वृक्ष पर घुटने मोड़े और हाथ फैलाये पुरुष की आकृति बनी है, लगता है कि यह पुरुष कुछ करने की मुद्रा में है। ठीक इसी के नीचे और त्रिशूल के ठीक ऊपर नीचे मुख किये लटकती सी एक दूसरी पुरुषाकृति बनी है, जिसका पृष्ठ भाग ही हमारे सामने है। स्पष्ट है कि यह ऊपर वाला पुरुष ही है जो अब त्रिशूल के ठीक ऊपर अपने को गिरा रहा है, अर्थात यहाँ कोई पेड़ पर से त्रिशूल के ऊपर कूदकर आत्महत्या कर रहा है। स्पष्टतः मत्स्य, वृक्ष के नीचे वाला शिवलिंग, उसके पूजक तथा आत्महत्या का यह अंकन किसी कथा सूत्र में बंधे हैं। इसी परिप्रेक्ष में मत्स्य की पृष्ठशिला पर बनी देव पंक्तियों आदि का भी विचार करना होगा। समूची पृष्ठशिला आठ सकरे खण्डों में पतली गोटों द्वारा विभक्त की गई है, जिनमें कुल तिरपन आकृतियाँ तथा पश्वादि बने हैं। अपने बायें से आरम्भ करें तो शीर्ष भाग के कोने पर प्रथम लक्ष्मी और बह्मा के साथ शेषशायी विष्णु के दर्शन होते हैं। यहाँ से इसी पंक्ति में दाहिनी ओर ज्वाला मण्डित सिर वाले ललितासन में बैठे अग्नि हैं। इसके बाद कोई पुरुष कृति थी जो टूट चुकी है। निचले दूसरे खण्ड का आरम्भ नमस्कार मुद्रा में बैठे दो उपासकों से होता है। इनके बाद गोद में शिशु लिये बैठी मातृका या मातृदेवी तथा ठिगने पैर वाला कुंभोदर यक्ष दिखलाई पड़ता है जिसका दाहिना हाथ ऊपर की ओर उठा है। पर्याप्त अन्तराल के बाद इसी खण्ड में बैठे हुए वायु के दर्शन होते हैं जिसके उठे हुए दोनों हाथों में वस्त्र खण्ड लहरा रहा है। वायु के बगल में ललितासन में बैठी एक पुरुषाकृति है, जिसका दाहिना हाथ अभय मुद्रा में है, स्पष्ट है कि यह भी कोई देवता है।

तीसरे खण्ड में प्रथम आकृति एक तपस्वी की है जो अपने घुटनों और कमर को योगपट्ट से कसे हैं। उसके बाद पिछले पैरों पर बैठा हुआ ऊर्ध्वपुच्छ वराह है। इस खण्ड की अन्तिम दो आकृतियों के रूप में अभय मुद्रा में बैठा हुआ एक पुरुष तथा उकड़ूँ बैठा हुआ कमलधारी सूर्य बने हैं।

चौथे और पाँचवें खण्ड का अधिकांश क्षेत्र विशाल मत्स्य के द्वारा



प्रयाग-पट्ट– बी० एम० एल० 1872.7.1.50

I	1. 3.	शेषशायी अग्नि	2. कूदता हुआ पुरुष 4. (	
II	1-2 5. 7.	उपासक मालाधर कूदता हुआ पुरुष	3. मातृका 6. घटधर 8. वायु	4, यज्ञ 9. पुरुष देवता
III	1. 4. 6.	 पीठयुक्त लिंग पुरुष देवता	2. यज्ञ वराह 5. घटधर 7. सूर्य	3. मालाधर
IV	1. 6.	ऋषि कुबेर	2-5 वेद	
V	1. 2-3	गरुड़ पुरुष देवता		
VI	1-8 9-10	नाग पुरुष देवता		
VIII	1-7 8-11	सप्त पुरुष (द्वीप) समुद्र		
VIII	1-8	नाग		

व्याप्त है, पर अवशिष्ठ भागों में आकृतियाँ हैं। चतुर्थ खण्ड में बाँयी ओर पाँच ऋषियों की पूर्ण या आंशिक आकृतियाँ हैं। प्रथम ऋषि अपने बाँयी ओर मुँह करके मोढ़े पर बैठा है और उसका दाहिना पैर भूमि पर टिका है। उसके बाद वाले दो ऋषि दर्शकों को देखते हुए पैरों के बल बैठे हैं और उनके घुटने योगपट्ट से बंधे हैं। अगले दो केवल अंशतः दृश्य हैं। ये ऋषि दाहिना हाथ अभय मुद्रा में उठाये तथा बाँयें में कमण्डलु लिये हैं। इस खण्ड के अन्त में मत्स्य मुख के ठीक पास उसी प्रकार बैठे हुए तुन्दिल तनु कुबेर के दर्शन होते हैं। उनके केश संवरे हुए हैं, गले में एकावलि और कानों में कुण्डल हैं।

पंचम खण्ड का आरम्भ अंशतः छिपे गरुड़ से होता है। गरुड़ के पंख खुले हैं, बाल खड़े हैं और पैर फैले हैं। इस खण्ड की अन्तिम दो आकृतियां ललितासन में बैठे दो पुरुषों की हैं, जो मत्स्य मुख से ठीक नीचे हैं।

छठे खण्ड में आठ नागों की पंक्ति है। ये नाग एक पैर लटकाकर बैठे हैं और प्रत्येक का मस्तक पाँच फणाओं से अलंकृत है। इनमें आयुध स्पष्ट नहीं है पर दाहिने हाथ में पात्र होने की संभावना है। इस खण्ड की आखिरी दो आकृतियाँ पुरुषों की हैं जो पंचम खण्ड की अन्तिम दो आकृतियों के समान हैं।

सातवें खण्ड में सात खड़े पुरुष हैं, जिनके उठे हुए बाँयें हाथों में घड़े हैं और दाहिने हाथ जांघों पर टिके हैं। इनके बाद दोनों हाथों में घट लिये चार आसनस्थ पुरुष हैं।

आठवें अर्थात् सबसे निचले खण्ड में आठ नागों की दूसरी पंक्ति है। इनके दाहिने हाथ अभय मुद्रा में हैं और बाँयें में कमण्डलु हैं, पर यहाँ प्रत्येक के मस्तक के पीछे केवल तीन फणाएँ हैं। इस खण्ड की अन्तिम दो वस्तुएँ भी कम रोचक नहीं हैं। ये पृथ्वी पर स्थापित दो घट हैं जिनमें एक के गले में साँप लिपटा है और दूसरा सादा है।

अब इन विविध आकृतियों की पहचान की ओर चलें। दूसरे खण्ड के दो उपासकों को छोड़ दें तो ये आकृतियाँ निम्नांकित रूप में पहचान की और विभिन्न वर्गों में बांटी जा सकती हैं।

वर्ग- 1 शेषशायी विष्णु, अग्नि, वायु, सूर्य तथा कुबेर।

वर्ग- 2 ललितासन में बैठे पुरुष जो विविध आभूषण पहिने हुए हैं और जिनके केश व्यवस्थित रूप में सँवारे हुए हैं। अभय मुद्रा में उठा दाहिना हाथ इनके देवत्व का प्रतीक है। इन पुरुषों की कुल संख्या 6 है दूसरे तथा तीसरे खण्ड में एक-एक तथा पाँचवें व छठे खण्ड में दो-दो। आयुधादिकों के अभाव में इन पुरुषों की ठीक पहचान नहीं हो पाती।

वर्ग- 3 अंकगत शिशु के साथ मातृका

वर्ग- 4 यज्ञ वराह

वर्ग- 5 पंख फैलाये उड़ता हुआ गरुड़

वर्ग- 6 तपस्वी जन। इन्हें दो उपवर्गों में विभक्त करना उचित होगा। प्रथम में खण्ड 3 और 4 का आरम्भ करने वाले दो-दो ऋषियों को समाहित करना होगा जो अभय मुद्रा में तो हैं, पर उनके बैठने की पद्धति में अन्तर है। दूसरे उपवर्ग में वे चार ऋषि आयेंगे, जो अभय मुद्रा में हैं और जो महामत्स्य के ठीक पीठ पर

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सामने मुँह किये दिखलाई पड़ते हैं। ये चार जैसा हम आगे देखेंगे मूर्तिमन्त वेद हैं।

वर्ग- 7 पुरुष रूप में नाग। ये भी दो प्रकार के हैं। प्रथम उपवर्ग 5 फण वाले नागों का है। ये आठ स्पष्टतः दूसरे उपवर्ग से श्रेष्ठ होंगे, जिसके नागों की केवल तीन ही फणाएँ हैं। सबसे निचले खण्ड में इन त्रिफणांकित आठ नागों की उपस्थिति उनके निवास स्थान पाताल की ओर संकेत करती हैं। इन पुरुषाकृति नागों के अतिरिक्त सरीसृप के रूप में भी दो सर्प हैं एक तो अनन्त शायी विष्णु का शेष और दूसरे दो में से एक घड़े के गले से लिपटा एक फण वाला छोटा साँप।

वर्ग- 8 खण्ड 6 में दृष्टिगोचर होने वाले घटधारी पुरुष। यहाँ भी दो उपप्रकार स्पष्ट हैं। पहला समूह सात पुरुषों का है जो खड़े हैं और एक ही हाथ में घट लिए हुए है, दूसरा समूह चार पुरुषों का है जो आसनस्थ हैं और दोनों हाथों से घड़े को थामे हैं।

इन सबके अतिरिक्त अष्टम खण्ड के अन्त में विद्यमान दो कुम्भों का भी विशेष अभिप्राय होना चाहिए।

इस प्रकार समूचे शिलापट्ट पर अंकित देवादिकों से परिचित होने के बाद समष्टि रूप में अंकित कथ्य विषय की पहचान की ओर मुड़ें। इसके लिए हमें अनिवार्य रूप से साहित्यिक साक्ष्य भी ढूँढने होंगे।

शिलापट्ट की प्रमुख आकृति महामत्स्य है। मध्य भारत में प्रतिहार-काल के आरम्भ अर्थात् लगभग 8वीं शती से ही विष्णु मूर्ति की पृष्ठशिला पर दशावतारों के अंकन में मत्स्यावतार के रूप में केवल मछली दिखलाई जाती है। इस मछली की पीठ पर बहुधा चार पुरुष या केवल चार मानव मस्तक भी बने होते हैं, जो चार वेदों के प्रतीक हैं[2] जिन्हें मत्स्यरूपी महाविष्णु ने शंखासुर को परास्त कर मुक्त किया था। प्रतिहार कला में मत्स्यावतार को अंकित करने की एक अन्य पद्धति भी प्रचलित थी। यहाँ मत्स्य की पीठ पर दो उपासकों के बीच में शिवलिंग दिखलाया जाता था।[3] क्वचित स्थानों पर यह शिवलिंग किसी वृक्ष के नीचे स्थापित सा दिखलाते हैं[4] कुछ कलाकार एक पग और आगे बढ़ गये और उन्होंने मत्स्य और वृक्ष के साथ लिंग के स्थान पर शिव की आवक्ष प्रतिमा ही बना दी[5]। लन्दन वाले विचाराधीन शिला पट्ट में प्रतिहार कालीन इन सब प्रकारों को एकत्रित कर दिया है, किन्तु यहाँ शिव की आवक्ष मूर्ति लिंग से बड़ी है तथा अगल-बगल दो पुरुष अनुचर और दो घटधारिणी स्त्रियाँ भी बनी हैं। साथ ही महामत्स्य की पीठ पर चार वेदों को ऋषि रूप में अंकित किया गया है[6]।

इस प्रकार सभी प्रमाणों के आधार पर लन्दन वाले शिलापट्ट पर अंकित मछली को महाविष्णु के प्रथम अवतार अर्थात मत्स्यावतार के रूप में पहचान सकते हैं। पर यहाँ कलाकार स्पष्टतः इससे कुछ अधिक कहना चाहता है। इसके अतिरिक्त कथ्य का प्रमुख सूत्र वृक्ष के ऊपरी सिरे से त्रिशूल पर कूदकर की जाने वाली आत्महत्या के दृश्य में निहित है।

स्पष्ट है कि यह आत्महत्या जीवन से ऊबकर की जाने वाली वैयक्तिक प्रकार की नहीं है, अपितु धार्मिक पुट से ओत-प्रोत है। यही तथ्य हमें तत्काल तीर्थराज प्रयाग का स्मरण कराता है जहाँ धार्मिक परम्परा के अनुसार प्रयत्नपूर्वक हठात प्राण त्याग करना पाप कर्म या अपराध नहीं अपितु मोक्ष प्रदायक माना गया है।

तीर्थराज प्रयाग का महात्म्य, उसका क्षेत्र विस्तार वहाँ के प्रमुख देवता आदि का विस्तृत वर्णन हमें मत्स्य, पद्म, कूर्म तथा पुराण के कई अध्यायों में मिलता है। इन पुराणों के ये अध्याय थोड़े बहुत परिवर्तनों के साथ समान हैं। इनमें प्रयाग में की जाने वाली धार्मिक आत्महत्या का भी उल्लेख है, अनन्य पुण्य देने वाली ये आत्महत्या निम्नांकित में से किसी भी प्रकार से की जा सकती थीं :

1- हलकी जलने वाली आग में अपने को झुलसा कर। "तुषाग्नि सेवन" ऐसा ही प्रकार था।

2- जल में प्रवेश कर।

3- जलती हुई आग के ऊपर उलटे लटक कर।

4- अपने शरीर से माँस खण्डों को पक्षियों को खिलाते हुए अत्यधिक रक्तपात के कारण।

5- वट वृक्ष के मूल में अन्न त्याग द्वारा।

मृत्यु का आलिंगन करने के लिए वट मूल वाला क्षेत्र बड़ा पवित्र माना जाता था[8]। वट वृक्ष से कूदकर भी अर्थात् "भृगुपतन" के द्वारा भी आत्महत्या की जाती थी[9]। कदाचित चीनी यात्री युवेनच्वांग द्वारा इस पद्धति का उल्लेख किया गया है[10]। और लन्दन के विचाराधीन शिलापट्ट में इसका अंकन विद्यमान है। वृक्ष से गिरने के बाद मस्तक का नीचे त्रिशूल की नोकों से टकराना संभवतः कलाकार की अपनी सूझ है, जिसका निश्चित परिणाम गिरने वाले की मृत्यु है। यहाँ यह भी उल्लेखनीय है कि प्रयाग में वट वृक्ष के संरक्षक महेश्वर को "शूल पाणि" ही कहा गया है[11] एतावता वटमूल में स्थापित शिव के पास त्रिशूल का अंकन पूर्ण रूप से संयुक्तिक है।

ऊपर की हुई चर्चा हमें इस निष्कर्ष पर पहुँचाती है कि शिलापट्ट पर अंकित दृश्य प्रयाग से सम्बन्धित हैं, पर इसे निश्चयात्मक मानने के पूर्व निम्नांकित बिन्दुओं पर विचार करना आवश्यक है।

1- शिव और वट वृक्ष विशेषकर अक्षय वट का सम्बन्ध।

2- मत्स्यावतार विष्णु का प्रयाग से सम्बन्ध।

3- शिलापट्ट पर अंकित अन्यान्य देवताओं का प्रयाग से सम्बन्ध।

हम शिव से आरम्भ करें। मत्स्य और पद्म पुराण के अनुसार प्रयाग में महादेव का संस्थान था[12] अन्यत्र पद्म पुराण सूचित करता है कि प्रलयकाल में या एकार्णव स्थिति में जब भूमण्डल जल प्लावित हो जाता है तब शिव वट वृक्ष के मूल में निवास करते हैं[13]। साथ ही प्रयाग में शिव को वट का संरक्षक भी माना गया है । यह भी कथन है कि वट मूल में मृत्यु होने पर जीव स्वर्ण से कहीं ऊपर रुद्रलोक जा पहुँचता है[14]। ये सभी सन्दर्भ शिव के वट वृक्ष से सम्बन्धित होने की ओर संकेत करते हैं।

मत्स्यावतार विष्णु का प्रयाग से सम्बन्ध खोजना इतना सरल नहीं है, पर यहाँ स्कन्द पुराण के वैष्णव खण्ड के कुछ अध्याय[15], जिनकी पद्म पुराण में पुनरावृत्ति की गई है[16], हमारी अप्रत्याशित सहायता करते हैं। इनका सारांश निम्नलिखित है।

जब महाविष्णु क्षीरसागर में शेष पर शयन कर रहे थे। सागर के पुत्र शंख ने देवताओं पर विजय पाने के लिए सत्यलोक की ओर प्रस्थान किया और देव काल के मूल स्रोत वेदों को ही चुरा लेने का निश्चय किया। शंख से भयभीत होकर वेद भागे और उन्होंने समुद्र में अपने को इधर-उधर छिपा

लिया। शंख[10]। उनका पीछा करता रहा। इसी बीच देव गणों ने महाविष्णु को जगाया और सहायता की याचना की। विष्णु ने कहा कि वेदों को अभी समुद्र में ही छिपे रहने दो। उचित समय पर मैं मत्स्य का रूप लूँगा, शंख का वध करूँगा और वेदों का उद्धार होगा।

तदनुसार विन्ध्य पर्वत पर महाविष्णु ऋषि कश्यप के यहाँ मत्स्य के रूप में प्रगट हुए, असुर शंख का संहार किया और उसके कवच को अर्थात् शंख को हाथ में लेकर बदरीवन पहुँच गये। वहाँ ऋषियों को बुलाकर उन्होंने निर्देश दिया कि समुद्र से ऋषि गण वेदों का परिशोधन और संग्रह करें और उनके पास ले आएँ। तब तक वे स्वयं प्रयाग पहुँचेंगे। आदेशानुसार ऋषियों ने वेदों को प्राप्त किया। इस खोज में जिस ऋषि को वेद का जो भाग मिला, वह उसी के नाम पर विख्यात हो गया, अर्थात् वह ऋषि उसका 'दृष्टा' हुआ। वेदों का इस प्रकार संग्रह एवं परिशोधन करने के उपरान्त यज्ञ को साथ में लेकर ऋषि गण प्रयाग पहुँचे। यज्ञ और वेदों की प्राप्ति से ब्रह्मा अत्यन्त सन्तुष्ट हुए और उन्होंने अश्वमेध यज्ञ की व्यवस्था की। जिस स्थान पर यह "प्रकृष्ट याग" सम्पन्न हुआ, वह "प्रयाग" "प्रजापति क्षेत्र" या ब्रह्मक्षेत्र के नाम से विख्यात हुआ।[17] महाविष्णु ने सभी देवताओं को अपने साथ वहीं रहने के आदेश दिये जहाँ भविष्य में दो पवित्र नदियों का गंगा और यमुना का-संगम होने वाला था।[18]

पुराणों की यह कथा कई दृष्टिकोणों से लन्दन शिलापट्ट को समझने में सहायक होती है। प्रथम तो मत्स्यावतार विष्णु और प्रयाग की युक्तिसंगत संगति स्थापित होती है। दूसरे इस पट्ट पर गंगा-यमुना के अभाव का भी कारण स्पष्ट हो जाता है।[11] ब्रह्मा के यज्ञ की मत्स्यावतार वाली घटना सूर्यवंश के राजा भगीरथ द्वारा गंगा को पृथ्वी पर लाने के पूर्व की है। तीसरे इस घटना के सन्दर्भ में प्रयाग में ही मत्स्य विष्णु के साथ देव, ऋषि, नाग आदि की उपस्थिति का भी उत्तर मिल जाता है, जिनमें से कुछ को विचाराधीन शिलापट्ट पर प्रामुख्य से स्थान मिला है। इस प्रकार विवेचन की यह धारा हमें आठ खण्डों में दिखलाई पड़ने वाले देवादिकों की ओर ले जाती है, जिन्हें हम सुविधा के लिए आठ वर्गों में विभक्त कर चुके हैं। देवताओं के अधिक विवेचन के लिये भी हम उसी क्रम का अनुसरण करेंगे।

वर्ग 1- शेषशायी विष्णु आदि

शिलापट्ट के आरम्भ में शेषशायी का अंकन मत्स्यावतार के पूर्व स्थिति की ओर ही संकेत नहीं करता; अपितु पुराणों में वर्णित इन तथ्यों की ओर भी अंगुलि निर्देश करता है कि महाविष्णु "प्रजापति क्षेत्र" के संरक्षक देवता[19] 'एकार्णव' स्थिति में वहीं रहते हैं[20] और प्रयाग में वेणि-माधव के रूप में सदा पूजे जाते हैं[21]।

अग्नि, वायु, सूर्य और कुबेर, जिन्हें हम शिलापट्ट पर देखते हैं, आठ लोकपालों में गिने जाते हैं। अवशिष्ट दिक्पाल हैं सोम, इन्द्र, वरुण और यम। देव समूह में लोकपालों को अंकित करना प्रतिहार कला की एक परम्परा रही है। समकालीन कल्याण सुन्दर शिव की प्रतिमाओं में हम उन्हें देखते हैं[22] साथ ही हमें यह नहीं भूलना चाहिए कि प्रयाग में लोकपालों का निवास पुराणों द्वारा उल्लेखित हैं[22]। ऐसा प्रतीत होता है कि शिलापट्ट पर अंकित चार लोकपाल समूचे लोकपाल समूह का प्रतिनिधित्व करते हैं।

वर्ग- 2 पुरुष मूर्तियाँ

अभय मुद्रा में बैठे हुए कुल 6 पुरुष जो विभिन्न खण्डों में प्रदर्शित किये गये हैं, निश्चित रूप से देव पुरुष हैं, पर आयुधादि लक्षणों के अभाव में हम अभी तक उनकी ठीक पहचान नहीं कर सके हैं। ये सभी एक-दूसरे के समान हैं, अतएव अवश्य ही किसी वर्ग का प्रतिनिधित्व कर रहे हैं।

वर्ग- 3 शिशु के साथ मातृका

पुराणगत प्रयाग विषयक सन्दर्भ वहाँ किसी देवी की उपस्थिति का संकेत नहीं देते हैं। हाँ, "उर्वशी-पुलिन-तीर्थ" नामक स्थान का उल्लेख अवश्य है[23] पर उससे वहाँ पूजित किसी देवी पर कोई प्रकाश नहीं पड़ता। आज भी इलाहाबाद या प्रयाग के परिसर में किसी देवी से सम्बन्धित कोई प्राचीन पर महत्वपूर्ण स्थान नहीं दिखलाई पड़ता। अवसाद रूप में एक "अलोपी देवी" हैं, पर यहाँ भी कोई देवी प्रतिमा नहीं है, अपितु प्रतीक रूप में चबूतरे के ऊपर एक पालना लटकता हुआ दिखलाई पड़ता है। हमने अन्यत्र मातृकाओं की चर्चा करते समय यह दिखलाया है कि पालने का मातृका सम्प्रदाय से निकट का सम्बन्ध है[24]। अतएव सम्भावना यह लगती है कि विचाराधीन शिलापट्ट पर एकमेव मातृका का अंकन प्रयाग क्षेत्र से इस सम्प्रदाय के सम्बन्ध को सूचित करता हो।

वर्ग- 4 पिछले पैरों पर बैठा यज्ञ वराह

पुराणों के अनुसार प्रयाग में "यज्ञ" मूर्तिमान होकर उपस्थित रहा[25] मूर्तिशास्त्र पशुरूप में वराह को "यज्ञ-वराह" या यज्ञ का रूप कहा गया है, अतः मूर्तिमान यज्ञ के अंकन के लिए यज्ञ वराह का प्रतीक रूप से उपयोग युक्तिसंगत है। यह वराह से सम्बन्धित पुराणों[26] के शब्द यथा "यज्ञ पद", "क्रतुदन्त"[13] "अग्निजिह्व", दर्भरोम, आज्यनास, आदि इसी तथ्य की ओर संकेत करते हैं। यहाँ तक कि वराह की कुछ अलंकार युक्त संज्ञाएँ जैसे "उपकर्म रुचक" "प्रवर्ग व्रत भूषण", इत्यादि यज्ञ से ही सम्बन्धित हैं[27]।

वर्ग– 5 गरुड़ और दो कुम्भ

खण्ड पाँच में दिखलाई पड़ने वाले पंख फैलाये उड्डीयमान गरुड़ तथा खण्ड 8 के दो कुम्भ परस्पर से सम्बन्धित प्रतीत होते हैं, जिनमें एक घड़े के गले से नाग लिपटा है। ऐसा होते हुए भी इन तीनों का तीर्थराज प्रयाग से क्या सम्बन्ध हो सकता है, इसका कोई सुस्पष्ट और निश्चित उत्तर हमें नहीं मिला है। हाँ दूरान्वय से निम्न प्रकार के कुछ सम्बन्ध की परिकल्पना की जा सकती है।

पौराणिक परम्परा के अनुसार[28] अपनी माता विनता को सापत्न माता कद्रू के दास्यत्व से मुक्त कराने के लिये गरुड़ ने बलात् इन्द्र से अमृत कुम्भ (अमृत-घट, अमृत-भाजन, अमृत-कमण्डलु)[29] को प्राप्त किया था। पूर्व निश्चित शर्त के अनुसार गरुड़ ने वह अमृत कुम्भ नागों को सौंपकर विनता का स्वातंत्र्य तो लौटा दिया, पर इसी के साथ इन्द्र ने अमृत कुम्भ के स्थान पर विष कुम्भ को रखकर मूल कुम्भ चुरा लिया।[30] बेचारे नाग इन्द्र की चाल न समझ सके और उनके द्वारा विष को ही चाटा गया। लन्दन के विचाराधीन शिलापट्ट पर इस घटना के अंकित किये जाने के संकेत मिलते हैं। सबसे निचले खण्ड में अर्थात् पाताल लोक में नागों को अमृत कुम्भ सौंपकर गरुड़ उड़ते हुए 5वें खण्ड में दिखलाये गये हैं। इन्द्र ने अमृत कुम्भ का स्थान परिवर्तन कर वहाँ विष कुम्भ की स्थापना कर दी है, और इस चाल का शिकार नाग, जो समूचे नाग वर्ग का प्रातिनिध्य करता है, विष कुम्भ को ही लिपटे पड़ा है, बंगल में रखा अमृत का घड़ा उसकी पहुँच से बाहर है।

इस प्रकार शिल्पांकन से कथा की संगति तो बैठ जाती है, पर एक दूसरी समस्या सामने आती है अनेक पुराणों में दृष्टिगत होने वाली गरुड़ और अमृत कुम्भ की इस कथा का तीर्थराज प्रयाग से कोई सम्बन्ध

परिलक्षित नहीं होता। ऐसी स्थिति में उसका प्रस्तुत पट्ट पर अंकन किस प्रकार युक्तियुक्त माना जा सकेगा?

तीर्थराज प्रयाग का "कुम्भ" से अवश्य निकट सम्बन्ध है और अमृत कुम्भ से भी उसे जोड़ा गया है। मूल रूप में प्रयाग और "कुम्भ" का जोड़ ग्रहों की एक विशिष्ट प्रकार की स्थिति के परिप्रेक्ष्य में है, साथ ही कदाचित् साधारण जनता को समझाने के लिए कुम्भ शब्द के दोहरे अर्थ को ध्यान में रखते हुए उसे एक कथा का रूप भी दिया गया है। यह निम्नलिखित है।

"देवताओं और असुरों ने मिलकर अमृत की प्राप्ति के लिये क्षीर समुद्र को मथा। जब धन्वन्तरि हाथ में अमृत कुम्भ लेकर प्रगट हुए, तब देवताओं की सलाह से जयन्त उस कुम्भ को झपटकर चुपके से भागने लगा। असुरों को इसकी आहट मिली और उन्होंने जयन्त का पीछा किया। देवताओं द्वारा घट की सुरक्षा के लिये सूर्य, चन्द्र, गुरु और शनि को भी नियुक्त किया गया था। देवासुरों का यह झगड़ा बारह दिनों तक चला, इस अवधि के बीच कुम्भ भी चलायमान था। फलतः उसमें का अमृत चार स्थानों पर अर्थात् प्रयाग, विष्णु तीर्थ हरिद्वार, गोदातट-नासिक अथच अवन्तिका (उज्जैन) में छलका। इसी कारण से इन चार स्थानों पर कुम्भ मेलों का आयोजन हुआ करता है [31]।

कुम्भ मेले से सम्बन्धित प्रचार ग्रन्थों में इस कथा का स्कन्द पुराणान्तर्गत होना कहा गया है पर उसका कोई समुचित सन्दर्भ नहीं दिया गया है। प्राप्य स्कन्दपुराण में हमें भी वह नहीं दिखलाई पड़ी। तथ्य यह है कि प्रयाग में महा कुम्भ का आयोजन प्रति बारहवें वर्ष होता है, जब सूर्य और चन्द्र मकर राशि में होते हैं और गुरु मेघ पर। गुरु एक राशि को एक वर्ष में लांघता है अतः स्वभावतः यह योग बारह वर्ष बाद आता है। इसके अतिरिक्त छः वर्ष पर 'अर्ध कुम्भ' और प्रति वर्ष माघ में कुम्भ का आयोजन होता है। शेष स्थानों पर कुम्भ का आयोजन विभिन्न प्रकार की ग्रह स्थिति में होता रहता है।

जिस प्रकार ज्योतिष वाले इस कुम्भ योग को प्रयाग से सम्बन्धित करने के लिए जयन्त वाली उपरोक्त कथा गढ़ी गई, उसी प्रकार किसी अन्य परम्परा में कुम्भयोग का जोड़ गरुड़ द्वारा अमृत कुम्भ आहरण वाली प्रसिद्ध कथा से बैठाया गया होगा। विचाराधीन शिलापट्ट को गढ़ने वाले कलाकार ने ऐसा लगता है कि उसी का अनुसरण करते हुए प्रयाग और महाकुम्भ का संकेत करने के लिये 5वें खण्ड में उड़ता हुआ गरुड़ और निचले खण्ड में नाग पंक्ति के अन्त में दो कुम्भों को दिखलाया हो। पर अभी हम इस विधान को एक निष्कर्ष के रूप में नहीं अपितु केवल एक अनुमान के रूप में ही उपस्थापित करना चाहेंगे।

वर्ग- 6 तपस्वी जन :

खण्ड तीन और चार के आरम्भ में दिखलाई पड़ने वाले तपस्वियों का अपना एक वर्ग है। प्रतीक रूप से ये ऋषियों का प्रातिनिध्य करते हैं जिन्हें बिखरे हुए वेदों को बटोरने, परिशोधित करने और यज्ञ के साथ मत्स्यावतार विष्णु के पास प्रयाग में लाने का उत्तरदायित्व सौंपा गया था। प्रयाग में सम्पादित यज्ञ के भी ये अनिवार्य सदस्य रहे होंगे। तपस्वियों के दूसरे वर्ग में मत्स्य की पीठ पर विराजमान चार ऋषिगण हैं, जो वस्तुतः मूर्तिमान वेद हैं[25] जिनका मत्स्य के कारण उद्धार हुआ था।

वर्ग- 7 नाग :

छठे खण्ड के आठ पुरुषरूप धारी नाग पाँच फणाओं वाले हैं, पर आठवें खण्ड के उसी प्रकार के उतने ही नाग तीन फणाओं वाले हैं। इनके अतिरिक्त शेषशायी विष्णु का शेष और दो में से एक घड़े के गले से लिपटा सर्प अपने मूल रूप में है। अन्तिम दो सर्प तो कोई समस्या उपस्थित नहीं करते, पर पुरुषाकृति नागों की पहचान सरल नहीं है। दोनों वर्गों की संख्या आठ है। परम्परा में अन्य नौ नागों की बात कही जाती है, पर महाभारत का खिल पर्व "हरिवंश" अष्ट नागों का उल्लेख करता है।[32] ये आठ नाग हैं। वासुकी, कर्कोटक, तक्षक, धनञ्जय, एलापत्र, कालिय, महापद्म और शेष। इनमें केवल वासुकी का आज भी प्रयाग से सम्बन्ध है। डा० वासुदेव शरण अग्रवाल ने भी **अष्टकुलिक** नागों की चर्चा करते हुए उनके नामों की दो सूचियाँ दी हैं [33] यथा–

सूची 1- तक्षक, महापद्म शंख, कुलिक, कम्बल, अश्वतर, धृतराष्ट्र और वलाहक।

सूची 2- शेष, वासुकी, कम्बल, कर्कोटक, पद्म, महापद्म, शंख और, कुलिक।

इस प्रकार अष्ट नागों का तो परिचय मिल जाता है, पर दोनों वर्गों के मूर्ति शास्त्रीय विशिष्ट लक्षणों के विषय में हम कुछ नहीं जानते। हाँ कुछ पुराणों के अनुसार कम्बल और अश्वतर का भी प्रयाग में निवास था[34]।

वर्ग- 8 घटधारी पुरुष :

ये सभी सातवें खण्ड में दो प्रकार के हैं खड़े और बैठे। सात तो खड़े हैं और चार बैठे हैं। मध्य भारत की मध्यकालीन कला में बहुधा हाथों में कुम्भ लिये समुद्रों को पुरुषों के रूप में अंकित किया जाता है। इन्हें मंदिरों में गर्भगृह के दरवाजों पर देखा जा सकता है[35] साधारणतया इनकी संख्या चार होती है[36] और स्कन्द पुराण के अनुसार[37] इनके नाम हैं— क्षीर समुद्र, क्षार समुद्र, दधि समुद्र और इक्षु समुद्र, जिनका सम्बन्ध क्रमशः शाकद्वीप, जम्बुद्वीप, कुशद्वीप, और शाल्मलि द्वीप से है। पुराणों की अन्य सूचियों में तीन और भी जोड़े गये सर्पि समुद्र, सुरा समुद्र और जल समुद्र। इस प्रकार उनकी संख्या सात हो गई। ऐसा प्रतीत होता है कि शिलापट्ट में दोनों हाथों में घट लिये बैठे हुए चार पुरुष चार महा समुद्र हैं। खड़े घटधारी सात पुरुष कदाचित् सर्पसागरों की दूसरी परम्परा को अंकित करते हैं। अथवा यह भी हो सकता है कि ये सात पुरुष सात द्वीप हैं, जिनमे पौराणिक परम्परा के अनुसार पृथ्वी विभक्त है। ये द्वीप हैं प्लथ, पुष्कर, शाल्मली, कुश, क्रौञ्च, शाक और जम्बू। पौराणिक उल्लेखों के अनुसार प्रयाग में सातों द्वीपों का और समुद्रों का निवास था।[38] यहाँ हमें यह भी स्मरण रखना होगा कि चार समुद्र तो मिल जाते हैं, पर सात द्वीपों का कलात्मक अंकन हमें अन्यत्र नहीं मिला है।

इस प्रकार साहित्यिक साक्ष्यों के आधार पर इतना तो निःसन्देह कहा जा सकता है कि लन्दन के ब्रिटिश म्यूज़ियम में संग्रहीत मध्य भारत का यह शिलापट्ट मत्स्यावतार का प्रमुखता से अंकन करते हुए तीर्थराज प्रयाग का भी कलात्मक रूप में अंकन करता है। स्वाभाविक रूप से प्रश्न सामने आता है कि किसी तीर्थ के इस प्रकार के अंकन के मूल में कौन सी विचारधारा रही होगी, और क्या इस प्रकार से अन्य तीर्थ भी अंकित किये जाते थे। सौभाग्य से कला और साहित्य से इस विषय पर भी प्रकाश पड़ता है।

तीर्थ पट्टों का इतरत्र अंकन और उद्देश्य–

लगभग तेरहवीं शती में भुवन देवाचार्य ने वास्तुकला तथा मूर्तिकला से सम्बन्धित एक विशाल ग्रन्थ की रचना की जिसका नाम है

'अपराजितपृच्छा' इसमें एक स्थान पर वाराणसी के कलात्मक अंकन की 'चतुःकुण्ड वाराणसी' इस शीर्षक से चर्चा की गई है[39] वहाँ यह कहा गया है कि जो लोग प्रत्यक्ष रूप से वाराणसी नहीं जा सकते या गंगा स्नान से लाभान्वित नहीं हो सकते हैं, वे वाराणसी का अंकन करने वाले शिलापट्टों का नित्य पूजन कर उतना ही पुण्य अर्जित कर सकते हैं, जितना उन्हें वाराणसी के प्रत्यक्ष दर्शन या गंगाजल में मृत्यु होने से मिलेगा। सौभाग्य से हमें मध्य भारत से ही लगभग 10-13वीं शताब्दी के कम से कम तीन 'वाराणसी शिलापट्ट' मिल चुके हैं, जिन्हें हमने अन्यत्र प्रकाशित किया है[40] उसी कड़ी से प्रस्तुत विचाराधीन पट्ट भी सम्बन्धित प्रतीत होता है और वाराणसी शिलापट्टों के समान इसे प्रयाग शिलापट्ट कहना चाहिए, और आशा करनी चाहिए कि साहित्यिक स्रोतों के अधिक मन्थन से 'प्रयाग पट्ट' के लिये भी वाङ्मयीन साक्ष्य मिल जायेंगे। वैसे परवर्ती काल के जैन साहित्य में तीर्थावतार पट्टों की चर्चा मिलती है और कला में नन्दीश्वर द्वीप, शत्रुंजय, गिरिनार एवं मेरू के भी दर्शन होते हैं, पर वर्तमान प्रयाग पट्ट से पहले इस बात की भी पुष्टि होती है कि तीर्थों के कलात्मक अंकन की परम्परा का आरम्भ कम से कम मध्य भारत में प्रतिहार कला से हो चुका था।

सन्दर्भ

1- हमने इस अत्यन्त रोचक शिलापट्ट को 13 मई, 1981 को ब्रिटिश म्यूजियम, लन्दन में देखा था और अध्ययनार्थ वहीं उसका साधारण सा रेखाचित्र भी बना लिया था। हम नहीं जानते कि किसी एशिया या यूरोप के अन्य विद्वान ने इस शिलापट्ट को समझने का प्रयास किया है या नहीं। हम उस समय शिलापट्ट का चित्र प्राप्त नहीं कर सके थे, पर अब सुहृवर बर्लिन निवासी डा० गौरीश्वर जी भट्टाचार्य और उनके मित्र श्री जॉन ज्यूडमाक की अविस्मरणीय सहायता और ब्रिटिश म्यूजियम के भारतीय विभाग के क्यूरेटर डा० जवाल्फ की अनुमति से अपेक्षित चित्र प्राप्त हो गये। फलतः इस शिलापट्ट की पहचान हम विद्वानों के विचारार्थ उपस्थापित कर सके हैं। इस बहुमूल्य सहयोग के लिए हम डा० भट्टाचार्य, श्री ज्यूडमाक और डा० जवाल्फ के चिरकृतज्ञ हैं।

2- एन० पी० जोशी, 1989, **ब्रह्मैनिकल स्कल्पचर्स इन दि स्टेट म्यूजियम, लखनऊ**, चित्र 60पृ. 239, लखनऊ संग्रहालय संख्या यू० एन० 16. पुरुष रूप में वेदों के वर्णन के लिये देखिये **स्कन्द पुराण**, वैष्णव, 27. 53-57, पृ० 850-51.

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4- राजकीय संग्रहालय, झाँसी, सं० 80.71, एस० डी० त्रिवेदी, 1983, **स्कल्पचर्स इन दि झाँसी म्यूजियम** झाँसी, चित्र 10 पृष्ठ संख्या 45.

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6- के० के० चट्टोपाध्याय, 1937 रेलिजियस स्यूसाइड ऐट प्रयाग, **जर्नल आफ दि यू० पी० हिस्टारिकल सोसायटी**, वाल्यूम X, जुलाई 1937, पी० टी० आई०, पी० पी० 65-79.

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8- **कूर्म**, 37. 7, पृ० 153, **अग्नि०**, 111-13, पृ० 236, **मत्स्य०**, 105. 11, पृ० 245, **पद्म०**, स्वर्ग०, 43. 43-44, पृ० 143-44.

9- देखिये ऊपर क्रमांक 6 पृ० 75.

10- एस० बील, **बुद्धिष्ठ रेकार्ड्स आफ दि सेक्रड वर्ल्ड** I, पृ० 232-33 (वाटर्स) **आन युवान च्वांग ट्रेवेल्स इन इण्डिया** I, पृ० 364, **एण्ड बील लाइफ आफ ह्वेन सांग** बाई शमन हुई ली, न्यू एडीशन, 1911, पृ० 184.

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12- **मत्स्य०**, 105.28, पृ० 245, **पद्म**, स्वर्ग०, 41.21, पृ० 139.

13- **पद्म०**, स्वर्ग०, 48.6, पृ० 152.

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कुसुम सरोवर (जनपद मथुरा) के भित्ति चित्र

राय आनंद कृष्ण

मथुरा के गोवर्धन परिक्रमा मार्ग पर एक पुण्यस्थली है जो कुसुम सरोवर के नाम से विख्यात है। एक समय यह क्षेत्र भरतपुर राज्य के अंतर्गत था। भरतपुर के महाराजाओं की छतरियां यहाँ विद्यमान हैं जिनमें इतिहास-पुरुष महाराज सूरजमल जाट की छतरी सर्वप्रमुख है। छतरियों की परम्परा पहले से ही राजस्थान में विद्यमान थी। ये स्मारक भवन हैं। यदि हम इनके वास्तु को देखें तो हम आचार्य आनन्द कुमार स्वामी के इस निष्कर्ष से सहमत हुए बिना नहीं रह सकते कि मौलिक रूप में इनका स्रोत हमें भरहुत और सांची को तोरणों और वेदिकाओं पर उत्कीर्ण बोधि-गृहों आदि के वास्तु में मिलता है। भारतीय कलाओं की यह अद्भुत और अनकही कहानी है कि अनेक क्षेत्रों में परम्पराएँ हजारों वर्षों तक चलती रहीं यद्यपि बीच में सदियों तक उनकी श्रृंखला नहीं मिलती। इस दृष्टि से भारतीय शिल्प शास्त्र का एक पुनरावलोकन अपेक्षित है।

यहाँ हमारा उद्देश्य कुसुम सरोवर की छतरियों के भित्ति चित्रों का एक संक्षिप्त मूल्यांकन है। एक समय ये सभी छतरियाँ भित्ति चित्रों से भरी थीं। प्रायः 1948 के प्रारम्भ में मुझे इन भित्ति चित्रों को प्रथम बार देखने का अवसर प्राप्त हुआ था। उस समय भी ये बहुत क्षत-विक्षत अवस्था में थे, परन्तु अपने मूल रूप में थे। परन्तु उस समय भी हम लोगों को यह देखकर बहुत पीड़ा हुई कि भरतपुर राज्य के आदेश से इन भित्ति चित्रों का 'नवीनीकरण' कराया जा रहा था। इस हेतु नाथद्वारा और जयपुर के चितेरे बुलाए गए थे, जो अपनी तत्कालीन शैली में तैल रंगों से इन चित्रों को 'सुधार' रहे थे, बल्कि पूरे का पूरा बदल रहे थे। हम लोगों के प्रतिवाद भी निष्फल गए। फिर भी घिसे-पिटे रूप में ही सही, मूल चित्रों के कहीं कहीं टुकड़े मिलते हैं। वे हम लोगों के अध्ययन के लिए अत्यन्त उपयोगी हैं।

इस हेतु हमें उस क्षेत्र की चित्रकला परम्परा का हलका सा परिचय प्राप्त करना अपेक्षित है। यह व्रज क्षेत्र के अंतर्गत है। ऐसी मान्यता है कि जिस समय राजस्थानी शैली का उदय हो रहा था, उस समय व्रज वल्लभ सम्प्रदाय कृष्ण भक्ति शाखा का प्रमुख केंद्र था। इस सम्प्रदाय में भगवान की 'सेवा पद्धति' में चित्रांकन भी है। अतएव इन वैष्णव मंदिरों में चित्रकला की एक शैली अवश्य विकसित हुई होगी। दुर्भाग्यवश उस शैली का एक भी निश्चित उदाहरण नहीं प्राप्त हुआ है। परन्तु इसकी पुष्टि एक अन्य सूत्र से होती है।

हमें ज्ञात है कि इस सम्प्रदाय का प्रमुख विग्रह 'श्रीनाथ जी' है। श्रीनाथ जी के मंदिर को जब औरंगजेब काल में नष्ट-भ्रष्ट करने की आशंका हुई तो भक्तगण प्रतिमा के साथ मेवाड़ राज्य पहुँचे और वहाँ राजधानी के पश्चिम, एक अत्यन्त सुरक्षित स्थान पर जिसे उस समय सिहाड़ कहते थे— आज श्रीनाथद्वारा कहते हैं— में प्रतिमा की स्थापना हुई, मंदिर बना। इस समय वह इस सम्प्रदाय का सर्वप्रमुख मंदिर है। इस मंदिर से सम्बद्ध चित्रकार, जो आज भी लोक-प्रसिद्ध लघुचित्र और पिछवई (चित्रित पर्दे) बनाते हैं, अपने आपको मूल रूप से मथुरा से सम्बद्ध मानते हैं। दूसरे शब्दों में हम इनकी वर्तमान कला के आधार पर इनकी मूल शैली अर्थात् मथुरा शैली की परिकल्पना कर सकते हैं। कुछ समय पूर्व रागमाला चित्रों के कुछ उदाहरण प्राप्त हुए हैं। पत्रिका के पृष्ठ के अनुसार यह रागमाला मथुरा में 1711 ई० में वृंदावन चित्रकार द्वारा चित्रित हुई। रागमाला के इन चित्रों में हम एक बिलकुल ही निश्चित रूप पाते हैं जिसके द्वारा इस शैली का एक सीमा तक ही मूल्यांकन सम्भव है क्योंकि ये चित्र एक बहुत उत्कृष्ट शैली के उदाहरण नहीं हैं, वरन् जन-साधारणीय कला शैली के उदाहरण जान पड़ते हैं। फिर भी इतना तो सुनिश्चित है कि राजस्थानी शैली के चित्रों के बृहद् मंडल के अन्तर्गत स्थानीय मथुरा शैली के उदाहरण हैं। इन चित्रों में बुझे हुए गैरिक रंग जैसे रामरज प्रकार के रंगों का प्रयोग है। हम इन धातु-रंगों का मिलता-जुलता प्रयोग भरतपुर राज्य संग्रहालय केकई चित्रों में भी पाते हैं। इस साक्ष्य के आधार पर कहा जाता है कि उक्त मथुरा शैली का एक बृहत्तर मंडल था, संभवतः भरतपुर की स्थानीय चित्रशैली की एक शाखा थी।

भरतपुर से प्राप्त चित्र प्रायः 1775 ई० से मिलने लगते हैं। इस काल में राजस्थानी शैली का रूप बिखरने सा लगता है परन्तु कुछ नए केंद्रों में उसी बिखराव में कई नई उत्तेजना भी मिलती हैं। भरतपुर में जाट साम्राज्य के उदय के साथ-साथ वहाँ एक चित्रशैली का उदय होना स्वाभाविक ही था। यद्यपि इस राज्य की अधिक निकटता व्रज से थी, परन्तु व्रज और

राजस्थान के संधिस्थल पर अवस्थित होने के नाते भरतपुर शैली के चित्रों में दोनों ही प्रभाव मिलते हैं, इनमें राजस्थानी शैली के प्रभाव की तो परख की जा सकती है परन्तु मथुरा अथवा व्रज शैली का इसमें योगदान था, इसका ठीक-ठीक मूल्यांकन करना बहुत कठिन है क्योंकि स्वयं मथुरा शैली के ही ठीक-ठीक उदाहरण नहीं मिलते– जैसा हम ऊपर देख चुके हैं। परन्तु भरतपुर शैली के चित्रों, जिनके उदाहरण मूलतः हमें भरतपुर संग्रहालय में ही देखने को मिलते हैं, का रंग विधान राजस्थानी शैली के चित्र विधान से बिलकुल ही भिन्न हैं। राजस्थानी शैली के चित्र अपने प्रत्यग्र (चटकीले) रंगों के लिए प्रसिद्ध हैं। अठ्ठारहवीं शती के उत्तरार्ध में, जिस काल विशेष की यहाँ चर्चा हो रही है तो यह प्रवृत्ति और भी अधिक बढ़ गई थी। दूसरी ओर भरतपुर शैली के ज्ञात चित्रों में रंग विधान बुझा हुआ है जिसे पाश्चात्य चित्रकला में 'सोंबर' कहते हैं। यह परम्परा मथुरा शैली के उन चित्रों से प्रभावित है, जिनकी हम ऊपर चर्चा कर चुके हैं। यद्यपि मथुरा शैली के चित्रकारों ने श्रीनाथद्वारा जाकर अपनी परम्पराओं को मेवाड़ी शैली के अन्तर्गत ढाल दिया था, पर जान पड़ता है कि कुछ चित्रकार व्रज क्षेत्र में काम करते आ रहे थे। इन चित्रकारों में मूल परम्परा बची रही हो तो आश्चर्य नहीं।

भरतपुर शैली की दूसरी विशेषता पर, जो स्फुट चित्रों में मिलती है, वहाँ के महाराजाओं के ही नहीं उस क्षेत्र भर के व्यक्तियों का प्रभाव दिखलाई पड़ता है। इन चित्रों में दरबार, शिकार, जुलूस आदि के दृश्य हैं तो कृष्णलीला आदि के भी। परन्तु सभी दृश्यों में एक ठेठपन दिखलाई पड़ता है। दूसरे शब्दों मे अन्य स्थानीय शैलियाँ बहुत अधिक अलंकृत अभिव्यक्तियाँ थीं, जैसे घनी और अलंकारयुक्त वृक्षों की पृष्ठभूमि, वस्तु एवं वास्तुओं पर गहरे अलंकरण आदि। भरतपुर शैली में इनका प्रयोग कम हुआ है और यदि हुआ भी है तो बड़े जोरदार ढंग से, कृत्रिमता से दूर। इसी प्रकार अन्य शैलियों में आकृतियों में नज़ाकत दिखलाई पड़ती है। अठ्ठारहवीं शती के अन्त में अधिकांश राजदरबारों में एक प्रकार की शिथिलता और श्रृंगारिका आ चुकी थी। अतः उनके दरबारों की चित्रशैलियों पर ये प्रवृत्तियाँ यदि छा गईं तो आश्चर्य क्या। परन्तु यह भी एक विलक्षण तथ्य है कि राजस्थानी शैली के बहुत बड़े वृत्त के अन्तर्गत कुछ ऐसी स्थानीय शैलियाँ भी उत्पन्न हुईं, जिनमें एक प्रबल अथवा प्रकांड वातावरण है। तुलनात्मक दृष्टि से हम मेवाड़ के अन्तर्गत देवगढ़ नामक उपराज्य (ठिकाणे) की चित्रकला को ले सकते हैं। अब यह सिद्ध हो चुका है कि प्रायः 1770-75 के बीच मेवाड़ अथवा उदयपुर दरबार के ही कुछ चित्रकार, किसी कारणवश, देवगढ़ चले गए। परन्तु देवगढ़ में उन्होंने एक अत्यन्त प्रबल चित्रण की परम्परा स्थापित की जिसकी तुलना में स्वयं उन्हीं के बनाए उदयपुर दरबार वाले चित्र नहीं ठहर सकते। इस परिस्थिति को परखने के लिए हमें चित्रकार और उनके प्रतिपालकों की मानसिकता को भी परखना होगा। ऐसा प्रायः पाया गया है कि परम्परागत कला-शैलियों में जब एक मोड़ आता है तो उनमें एक नए जीवन का संचार भी हो जाता है यदि स्थानीय वातावरण इसके लिए पर्याप्त हो।

भरतपुर राज्य शैली भी कुछ इस प्रकार की है– एक ओर तो चित्रों में विशेष रूप से मानव आकृतियों में एक सहज ओज, उनके सीधे-सादे परन्तु प्रभावशाली संयोजन, तो दूसरी ओर अनलंकृत पृष्ठभूमि और धूसरित रंग आदि। ये सभी उस जुझारू जाति की मानसिकता को प्रकट करते हैं जिसका प्रतीक भरतपुर राजवंश था। दरबारी कला होते हुए भी यह उन जाट-राजाओं की कला है जिनका अधिकांश जीवन अर्ध-रेगिस्तानी ऊबड़-खाबड़ और खादर प्रदेश की मिट्टी से जुटा था। एक ओर तो ऐश्वर्य-भोग था दूसरी ओर ललकार से भरा जीवन। इसीलिए इनके चित्रों के विषय में राजकीय ऐश्वर्य या श्रृंगारमय वातावरण मिल सकता है पर उसकी अभिव्यक्ति के क्षणों में वही घटती-छाप प्रगल्भता भी है।

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हम ऊपर कह चुके हैं कि कुसुम सरोवर स्थित इन छतरियों में इसी भरतपुर शैली के चित्रण का प्रयोग हुआ है। उत्तर प्रदेश पुरातत्व संगठन ने इन भित्ति चित्रों की प्रतिकृतियाँ सुप्रसिद्ध चित्राचार्य श्री वासुदेव स्मार्त से तैयार कराई थीं, आशा है उनके आधार पर इनका एक बृहद् अध्ययन हो सकेगा। इसके अतिरिक्त प्रत्येक छतरी का काल विभाजन भी अपेक्षित है जिससे इस शैली के विकास को दर्शाया जा सके। प्रस्तुत लेख उत्तर प्रदेश पुरातत्व संगठन द्वारा प्रेषित कुछ फोटोग्राफों पर आधारित है अतः उसी सीमा के भीतर तैयार किया गया है। स्वाभवतः उन भित्ति चित्रों पर स्वल्प ही विचार करना संभव है जिनका इसी सदी में 'पुनरुद्धार' कराया गया है। उन उदाहरणों में विषय-वस्तु (थीम) तो पुराने हैं, परन्तु शैली की दृष्टि से वे सर्वथा भिन्न हैं। उनमें चटकीले तैलीय रंग (आयल कलर) का प्रयोग हुआ है और वे तत्कालीन श्रीनाथद्वारा शैली के चित्रकारों द्वारा प्रस्तुत किए गए हैं। किसी-किसी स्थल पर हमें यह भी संभावना प्रतीत होती है कि कुछ अंश प्राचीन हैं और साथ ही कुछ नवीन भी। परन्तु इस तथ्य को ठीक-ठीक मूल चित्रों को देखकर ही निर्धारित किया जा सकता है अथवा उनकी फोटोग्राफी विस्तृत और निकट से की गई तो उसमें कुछ सहायता मिल सकती है। कुछ प्राचीन चित्र इतने टूट गए हैं कि फोटोग्राफ के आधार पर उनका मूल्यांकन नहीं हो सकता : उदाहरणार्थ चित्र सं० 1 परन्तु यह तो स्पष्ट ही है कि इसमें राजमहल का एक बहुत विस्तृत दृश्य है संभवतः यह कृष्ण का राजमहल है। बात विशेष रूप से दृष्टव्य हैः यह दृश्य एक अर्ध गोलाकार सतह पर बना है। इसका समुचित उपयोग हुआ है। अर्थात् बीचो-बीच एक तिमंजिला प्रासाद है जबकि पार्श्व भागों में वास्तु की रेखाएँ ढालुएदार हैं और उनमें इसी ढंग से आकृतियाँ सजाई गई हैं। सारा दृश्य तड़क-भड़क का है परन्तु यह भी ध्यान देने योग्य है कि अधिकांश आकृतियाँ सीधे-सीधे खड़ी मुद्रा में हैं। फोटोग्राफ से ऐसा प्रतीत-सा होता होता है कि दूर पृष्ठभूमि में कुछ नीची पहाड़ियाँ या चट्टानें हैं। यह अंकन बिलकुल ही परम्परागत शैली में हुआ है, परन्तु यहाँ उसको एक अलंकरण के समान दिखलाया गया है, इससे कुछ आकर्षण बढ़ जाता है।

चित्र सं० 2 स्थानीय शैली का एक अच्छा उदाहरण है। यहाँ संभवतः भरतपुर के कोई राजा अपनी रानी के साथ झूला झूल रहे हैं। मोर मुकुट वाली आकृति वाले उनके मुकुट से ऐसा प्रतीत-सा होता है कि यह कृष्ण की आकृति हो सकती है। परन्तु ध्यान देने से उनकी मूछ प्रकट होती है जो पतली और पीछे की ओर झुकी हुई है। अतएव इस आकृति को मानवीय ही मानना होगा। इस चित्र में भी लोक शैली की कई विशेषताएँ हैं यथा रानी की आकृति अत्यन्त छोटी है। इससे उसे मुग्धा-नायिका रूप दिया गया है। उसके हाव-भाव सीमित हैं, पर कमनीय हैं और उनसे नायिका की लज्जा-सी प्रतीत होती है। उसके पार्श्व में बैठे राजा अपेक्षाकृत बृहदाकार हैं और टनके हाव-भाव प्रबल एवं श्रृंगारिक हैं। पर इन दोनों आकृतियों की तुलना में पार्श्व में खड़ी सखियों की आकृतियाँ बहुत बड़े आकार में प्रस्तुत की गई हैं। इनमें दो झूला झुला रही हैं और बाद की एक आकृति तानपूरे के आधार पर गा रही है, उसके विपरीत दिशा में मृदंग बजा रही है। ये सभी आकृतियाँ अत्यन्त अभिव्यक्तिपूर्ण हैं। एक ओर एक वृक्ष है जिसकी झुकी हुई डाल पर झूला डाला गया है। सपाट पृष्ठभूमि के उस पार अन्य वृक्षों के पत्तों के झुप्पे झांकते से दिखाई देते हैं।

इस चित्र से शैली पर बहुत प्रकाश पड़ता है और प्रारम्भ में दिए गए

हमारे निष्कर्षों की पुष्टि भी होती है। हम कह चुके हैं कि इस परम्परा में लोक-चेतना के भी तत्व हैं। जैसे यहाँ बृहदाकार सखियों की तुलना में झूले पर बैठे युगल को किशोर-किशोरी स्वरूप देने में सफलता मिली है क्योंकि ये छोटे आकार के हैं। सखियों के चेहरों से इस शैली परम्परा के चेहरों का प्रकार भी निश्चित किया जा सकता है। एक तो सारे शरीर के अनुपात में ये चेहरे काफी छोटे हैं और प्रायः अंडाकार हैं। सभी चेहरे एक प्रकार के हैं और उनकी व्यक्तिगत विशेषताएँ अथवा भिन्नताएँ नहीं प्रकट की गई हैं। सत्रहवीं शती के आगरा शैली के सामान्य चित्रकला में ऐसे अंडाकार चेहरे दिखवाई पड़ते हैं जिनमें कपाल प्रायः बिलकुल गोल है। आश्चर्य है प्रायः डेढ़ सौ वर्ष बाद भी यह परम्परा कुसुम सरोवर के चित्रों में चल रही थी। यहाँ आंख का आलेखन भी ध्यान देने योग्य है, ये पतली और नोकीली हैं, सामान्य राजस्थानी उप-शैलियों की भाँति चौड़ी नहीं।

इनकी चोली अत्यन्त छोटी है (यह भी एक पुरानी परम्परा थी) पर घाघरा बूटीदार और बहुत चौड़ा है। यहाँ पीछे की ओर उसकी फहरान में भी तीव्र कोण दिखलाया गया है जिससे एक जीवन्तता आ जाती है पर ठेठपन भी प्रकट होता है। उधर आंचल की फहरान में बहुत संवेदनशील लहराती हुई रेखाएँ हैं।

यहाँ वृक्षों के प्रकार भी विचारणीय हैं, क्योंकि इन्हीं आधारों पर शैली का मानवीकरण होता है। किसी सीमा तक इनकी परम्परा तीन साढ़े तीन सौ वर्ष पूर्व स्थापित हो चुकी थी फिर अनेक स्थानीय शैलियों ने उनको ग्रहण किया और उन्हें अपना-अपना निजी स्वरूप दिया। आश्चर्य यह है कि समय के इतने अंतराल तक ये परम्पराएं — कम से कम अपने मौलिक स्वभाव में — कैसे चलती रहीं। इनमें वृक्ष की पत्तियों के गुच्छे प्रायः समान आकार वाले अंडाकार होते हैं और ये गुच्छे इस प्रकार बंटे हुए होते हैं मानों शरीफे का फल हो। इनमें पृथकता दिखलाने के लिए विभिन्न प्रकार के हरे रंगों का संयोग होता है। प्रत्येक वृत्तार्ध में एक आलंकारिका अभिप्राय (मोटिफ) होता है। झूले वाले इस दृश्य में पूर्व भूमि (फोर ग्राउंड) में ऐसे ही वृक्षों की श्रृंखला है जिनकी चोटी मात्र दिखलाई गई है। इन वृक्षों की इस प्रकार की बाड़ सी दिखलाई गई है कि एक-दूसरे से सटे हुए हैं। प्रायः इसी प्रकार सुदूर पृष्ठभूमि में भी वृक्ष हैं, यहाँ उनकी टेढ़ी-मेढ़ी टहनियाँ भी हैं जिनमें चित्रकार ने पूर्ण स्वच्छंदता तो दिखलाई है परन्तु वह बहुत गतिमान और जोरदार अंकन नहीं कहा जा सकता। हम ऊपर कह चुके हैं कि सखियों के बीच एक वृक्ष है जिसका सुस्पष्ट अंकन हुआ है। शैली की पहचान के लिए यह बहुत उपयोगी है। ध्यान से देखने से ज्ञात होता है कि यह वृक्ष दृश्य के भीतरी भाग की ओर झुका हुआ है। यह भी मध्यकालीन चित्रकला (प्रायः 14वीं से 16वीं शती) की देन है। इन तत्वों से भी इस संकेत का पुष्टिकरण होता है कि प्राक् राजस्थानी चित्रशैली काल से मथुरा क्षेत्र में एक चित्रशैली थी, बाद में जिनके बहुत स्वल्प प्रमाण मिलते हैं। परन्तु वर्तमान चित्र की स्थिति तक आते-आते इसके स्वरूप में बहुत परिवर्तन हो जाते हैं, कहीं-कहीं पुरानी परम्पराएँ — स्मृतियों के समान — दिखलाई पड़ती हैं। उदाहरण के लिए तने में लहरियादार टूटी-फूटी रेखाएँ हैं। मध्यकाल में गांठदार तने अंकित किए जाते थे, यह अंकन उसी परम्परा में है पर यह उसका एक लौकिक रूप सा है। ऊपरी भाग में डालियाँ शहतीर जैसी हैं, एक कटी हुई डाल से कुछ स्वाभाविकता का संकेत किया गया है। ये सभी आलेखन सामान्य स्तर के हैं। परन्तु चित्रकार ने एक पुरानी परम्परा को जीवित रखा है। पृष्ठभूमि में उठती हुई भूमि के ऊपर एक 'क्षितिज रेखा' (लाइन आफ होराइज़न) देना वह न भूला।

इस श्रृंखला में एक तीसरा चित्र (चित्र सं० 3) है जिसमें कृष्ण, राधा का केश विन्यास कर रहे हैं। इसमें भी उपर्युक्त विशेषताएँ विद्यमान हैं परन्तु दर्पण में मुख देखती राधा की अभिव्यक्ति बहुत कुछ सफल है। राधा, कृष्ण एवं पार्श्व में खड़ी दोनों सखियों की अभिव्यक्ति में काफी जीवन्तता है। वस्त्रों का अंकन अधिक संवेदनामय है। संभव है कि यह चित्रकार कुछ अच्छे किस्म का रहा हो। यहाँ कृष्ण के डुपट्टे के आंचल पर तत्कालीन 'बूटा' अंकित करना भी चित्रकार न भूला। सामने पूर्व भूमि (फोर ग्राउंड) में एक पतली सी पट्टी है जो वस्तुतः एक सरोवर का किनारा है। तट पर कुछ जंगली घास सी जमी है। यह प्रकृति निरीक्षण और परम्परा दोनों ही के आधार पर है। सर्वोपरि दोनों पार्श्वों में सारस की एक-एक आकृति है। इनके अंकन में चित्रकार ने स्वाभाविक और आलंकारिक आलेखन का अद्भुत संगम दिखलाया है। मानो ये पक्षी बड़े दर्प से पर घात लगाए खड़े हैं। इस चित्र की पृष्ठभूमि बिलकुल सादी है अन्त में एक 'क्षितिज रेखा' सी अंकित है।

उपर्युक्त चित्र में स्वयं कृष्ण की आकृति विशेष रूप से लक्ष करने योग्य है। उनका मुख तनिक मुड़ा हुआ है। इस मुखाकृति का आलेखन नितांत परम्परागत शैली में हुआ है जिसका संबंध सोलहवीं शताब्दी के जैन चित्रों से जुड़ जाता है। इन ग्रंथ चित्रों में जैन तीर्थंकरों की मुखाकृति इसी प्रकार की होती थी— यहाँ उसमें थोड़ी 'स्वाभाविकता' ला दी गई है।

इसी प्रकार एक स्थान पर रास का दृश्य है। शैली की दृष्टि से इसमें कोई पार्थक्य नहीं है पर हाव-भाव में उसी प्रकार की लोक शैली के समान उन्मुक्तता दर्शनीय है। बाहरी वृत्त में कृष्ण गोपियों के साथ, हाथ में हाथ दिए नृत्य कर रहे हैं। भीतरी वृत्त में कृष्ण वंशीवादन कर रहे हैं, उनकी तनिक सी झुकी हुई मुद्रा द्वारा संगीत में तन्मयता प्रकट होती है। उनके पार्श्वों में एक ओर नृत्य करते हुए ब्रह्मा और दूसरी ओर नृत्य करते हुए शिव हैं। कृष्ण भी नृत्य की मुद्रा में हो सकते हैं। तीनों आकृतियों के पैरों की मुद्रा एक सी ही है जिसमें घुटने मुड़े हुए हैं और पंजे दोनों पार्श्वों की ओर घूमे हुए हैं। पंजों की यही मुद्रा श्रीनाथ जी की नाथद्वारा वाली मूर्ति में भी मिलती है। तीनों ही आकृतियों में कृष्ण बहुत लंबा तथा चौड़े घेर वाला जामा पहने हुए हैं जो उस काल के राजपूत-मुगल समाज का वस्त्र-विधान था। परन्तु वंशीवादक कृष्ण के वस्त्र-विधान में उक्त जामे के अन्दर नृत्य गोपाल वाली काछनी भी झलकती है।

अब हम उन दृश्यों को लें जिन पर प्रायः दो पीढ़ी पहले नया रंग रोगन चढ़ाया गया है। इस प्रक्रिया से उनकी मौलिकता पूरी तरह से समाप्त हो चुकी है। नाथद्वारा-शैली के चित्रों की एक गहन परम्परा थी परन्तु इस शताब्दी के प्रारम्भ से उसमें बहुत बड़ा परिवर्तन आया। वहाँ के चित्रकारों पर फोटोग्राफी का प्रभाव पड़ा और वे थोड़ा-बहुत यथार्थवादी चित्रण करने लगे। वस्तुतः यह कहना उचित होगा कि इन चित्रकारों ने तथाकथित यथार्थवादी, चित्रण शैली की एक परम्परा तैयार कर ली थी जो पाश्चात्य यथार्थवादी चित्रण की वैज्ञानिक आधार भित्ति से बहुत कुछ भिन्न थी। इस परिवर्तन का कारण यह था कि लोक रुचि में परिवर्तन हो गया था, पुरानी परम्परा नष्ट हो चुकी थी और नया कला आंदोलन जन-साधारण तक नहीं पहुँच सका था। नाथद्वारा के ये चित्रकार कुछ-कुछ उस श्रेणी के चित्र बना रहे थे जैसे हम नाटकों के पर्दों पर पाते हैं।

उपर्युक्त स्थिति में कुसुम सरोवर के इस श्रेणी वाले भित्ति चित्रों का महत्व सीमित हो जाता है। अर्थात् इन पर शैली की दृष्टि से विचार के लिए स्थान ही नहीं रह जाता है। नाथद्वारा के इन चित्रकारों ने यह अवश्य किया है कि पुराने दृश्यों में हेर-फेर बहुत मामूली-सा किया है। यह भी हम अनुमान से कह सकते हैं क्योंकि इसकी पुष्टि में कोई निश्चित प्रमाण नहीं है। परन्तु इस नवीनीकरण के बाद भी मुक्त परम्परा वाले संयोजन युक्त चित्रण

मिलते हैं। साथ ही यह भी प्रतीत होता है कि सुदूर पृष्ठभूमि में इन चित्रकारों ने अपने घराने के दृश्य भी जोड़ दिए हैं।

इस वर्ग के चित्रों में (चित्र सं० 4) कृष्ण मंदिर के सम्मुख उपस्थित राजा का दृश्य है। इसमें भीड़-भाड़ है नीचे राजा के हाथी, घोड़े पालकी आदि से तड़क-भड़क में अभिवृद्धि होती है। परन्तु दृश्य के बाद कोने में तत्कालीन ठेठ नाथद्वारा शैली में कृष्ण-लीला के दृश्य दिखलाई देते हैं। एक अन्य दृश्य में भरतपुर के किसी राजा की हाथी पर सवारी का दृश्य है (चित्र सं० 5) इसमें धूमधाम है। यहाँ भी दृश्य के बाहर 'कोनियों' पर नाथद्वारा (बीसवीं सती के प्रारम्भ वाली) शैली में एक ओर गोवर्धन धारण का तो दूसरी ओर झूला झूलते राधा-कृष्ण हैं। मूल दृश्य से इन दृश्यों की अभिव्यक्ति में परिवर्तन दृष्टव्य है। चित्र सं० 6 में मूल दृश्य में छत पर दरबार का दृश्य है पीछे हलका सा भवन है सम्भवतः भरतपुर के ही किसी महल की इस पर छाप है। नीचे की पट्टी में कोई राजप्रासाद द्वारा में आ रहे हैं। उनके पीछे हाथी, ऊंट, घोड़े तथा परिजनों की अच्छी चहल-पहल है। हम कल्पना कर सकते हैं कि मूल रूप में यह चित्र कितना जीवन्त रहा होगा। यहाँ भी दृश्य के बाहर कोनियों में 'नाथद्वारा' शैली के चित्रण हैं : एक ओर होली का दृश्य है तो दूसरी ओर उद्यान में सखियों से घिरे राधा-कृष्ण हैं। इनकी अभिव्यक्ति साधारण प्रकार की है।

अन्त में हम एक ऐसे चित्र को लेते हैं जो मूल रूप में बहुत उत्कृष्ट रहा होगा। संयोगवश नाथद्वारा के चित्रकारों ने इसका मूल स्वरूप बहुत कुछ बना रहने दिया है (चित्र सं० 7)। इसमें भी दृश्य के बाद के कोनियों में तथाकथित नाथद्वारा शैली में चित्रित दृश्य हैं : एक ओर दानलीला का दृश्य है, दूसरी ओर उद्यान में बैठे कृष्ण नृत्य गान का आनन्द ले रहे हैं। परन्तु मूल चित्र आकर्षक है। इस वर्ग के उपर्युक्त अन्य चित्रों की भांति यह भी कमानीदार भूमि (स्पेस) के अन्दर अंकित हुआ है। यह शिकार का दृश्य है। मूल चित्रकार ने उस प्रदेश की निम्नोन्नत भूमि का बहुत संवेदनशील अंकन किया है। इसमें परम्परागत शैली का कुछ अंश हो सकता है परन्तु ढालुएदार गिरती-उठती टेकरियां, उनके बीच एक कमल वन, दूर पर वृक्षों के अतिरिक्त एक सूखा सा वातावरण आदि चित्रित किए गए हैं। स्पष्ट ही चित्रकार के मन पर स्थानीय सैरे (लैंडस्केप) की छाप थी। फिर रेखाएँ इतने प्रबल रूप में इधर-उधर दौड़ती-सी हैं कि प्रबल अंकन की सभी विशेषता उपस्थित होती है। घोड़ों, वन्य शूकर और शेर आदि पशुओं के भी अच्छे अंकन हैं। परंतु वनस्पति का अंकन सीमित है, इसी श्रेणी के कोटा-शैली वाले चित्रों की व्यापकता का अभाव है। एक ओर भीड़-भाड़ भरे वातावरण में महाराज के हाथी, घोड़े और परिजन हैं। शिकारी राजा एवं अन्य राजपुरुषों की मुद्राएं ओज भरी हैं। चित्र के वर्तमान स्वरूप से इसकी मूल अवस्था की भलीभांति कल्पना कर सकते हैं।

इस प्रकार कुसुम सरोवर की छतरियों पर अंकित भित्ति चित्रों द्वारा हम अठ्ठारहवीं शती की भरतपुर चित्र शैली और संभावित मथुरा शैली के संगम से उत्पन्न एक चित्र परम्परा का अच्छा परिचय पाते हैं। वस्तुतः इस विषय का गहन अध्ययन अपेक्षित है, जिससे और अधिक रोचक परिणाम प्राप्त होंगे।

श्री राय आनन्द कृष्ण
सीता निवास, काशी हिन्दू विश्वविद्यालय, वाराणसी- 221 005

गढ़वाल हिमालय की दुर्लभ महेश्वर महावराह प्रतिमाएँ

राकेश तिवारी
गिरीश चन्द्र सिंह

उत्तर प्रदेश के हिमालय क्षेत्र, कुमाऊँ एवं गढ़वाल मण्डल, में गत दशक में उ० प्र० राज्य पुरातत्व संगठन की अल्मोड़ा और पौड़ी स्थित क्षेत्रीय इकाइयों द्वारा कराये गये पुरातात्विक सर्वेक्षणों के फलस्वरूप अनेक महत्वपूर्ण पुरावशेष प्रकाश में आये हैं। इनमें अनेक दुर्लभ प्रतिमाएँ यथा– कुषाणकालीन नागराज[1], गुप्तकालीन अभिलिखित विष्णु[2] पूर्व मध्यकालीन भगादित्य[3], वामनक सूर्य[4], कामदेव[5], बौद्ध[6] और जैन प्रतिमाएँ[7], उल्लेखनीय हैं। ये मूर्तियाँ न केवल शिल्प कला की सुन्दर अभिव्यञ्जना हैं अपितु इन्होंने शिल्प शास्त्रीय अध्ययन के नये आयाम भी प्रशस्त किये हैं। प्रस्तुत लेख के अन्तर्गत गढ़वाल हिमालय से प्रकाश में आयी ऐसी ही दुर्लभ प्रतिमा– त्रिमुख हरिहर की ओर विद्वानों का ध्यान आकर्षित कराया जा रहा है।

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त्रिमुख हरिहर की दो प्रतिमाएँ गढ़वाल क्षेत्र में पायी गयी हैं। पहली[8] मूर्ति पौड़ी गढ़वाल जनपद के पैठाणी ग्राम और दूसरी[9] उत्तर काशी जनपद के मंदिरों में स्थापित है। पैठाणी की प्रतिमा वर्ष 1980-81 में गाँव के बाहर स्थित पंचायतन शिव मन्दिर से प्रकाश में आयी थी।[10] यह मूर्ति मुख्य देवालय में प्रतिष्ठापित शिवलिंग के अर्घे पर सीमेण्ट से जड़ी हुई थी। प्रारम्भ में इसका अभिज्ञान त्रिमुख हरिहर के रूप में किया गया। कालान्तर में अर्घे से निकालकर साफ करने पर इसका स्वरूप और अधिक स्पष्ट हो गया। साथ ही इसका निचला भग्न भाग भी निकट ही पड़े खण्डित प्रतिमाओं के ढेर से प्राप्त हो गया।

पैठाणी की प्रश्नगत प्रतिमा की माप भग्न भाग सहित 40×24×8 से०मी० है (चित्र संख्या 1)। इसके लिए हिमालय क्षेत्र की प्रतिमाओं के हेतु लोकप्रिय हरित प्रस्तर का प्रयोग किया गया है। इस मूर्ति में समभंग-स्थानक मुद्रा में प्रदर्शित देवता के मध्य मुख के मस्तक पर सुशोभित मुकुट का ऊपरी वाम भाग ऊँचे किरीट और दक्षिणी भाग जटाजूट सेयुक्त है। चतुर्भुज देवता के दक्षिणांश में अक्षमाला युक्त अगला दायाँ हाथ वरद् मुद्रा में दर्शाया गया है। दूसरे दायें हाथ में त्रिशूल शोभित है। वामांश के दोनों हाथ भग्न हो चुके हैं। अधोदक्षिण पार्श्व में भगवान शिव के वाहन नन्दी और वाम पार्श्व में विष्णु के वाहन गरुड़ का रूपांकन किया गया है। देवता को कुण्डल, कण्ठहार, यज्ञोपवीत, बाजूबन्ध, कंकण, कटिसूत्र और अधो परिधान के रूप में धोती से विभूषित किया गया है। प्रलम्बमाल घुटनों से नीचे तक शोभायमान है। मस्तक के पृष्ठ भाग में पूर्ण विकसित पद्म एवं अन्य गढ़नों से सुसज्जित प्रभामण्डल आलोकित है। इसका ऊपरी भाग भग्न हो चुका है। परिकर पत्रवल्ली से सुसज्जित है।

इस प्रकार पैठाणी की प्रश्नगत प्रतिमा का उपर्युक्त विवरण गढ़वाल और कुमाऊँ तथा अन्य क्षेत्रों से ज्ञात बहुसंख्यक सामान्य हरिहर प्रतिमाओं से साम्य रखता है, किन्तु इस प्रतिमा में मुख्य मुख के दोनों पार्श्वों में एक-एक अतिरिक्त मुख का अंकन इसे दुर्लभता प्रदान करता है। इनमें दक्षिणी पार्श्व में शिव का रौद्रमुख और वाम पार्श्व में वराहमुख का रूपांकन दिखता है। रौद्रमुख के फूले हुए नथूने, भयावह नेत्र, खुदरी कूर्च, मुण्ड और सर्प विभूषित जटाजूट तथा वराहआनन के दंष्ट्रकराल दर्शनीय हैं।

उत्तर काशी की त्रिमुख हरिहर प्रतिमा धातु निर्मित है (चित्र संख्या २) । सम्प्रति यह मूर्ति संग्राली ग्राम के कण्डार देवता नामक मंदिर में स्थापित है।[11]। 30 से०मी० ऊँची और 15 से०मी० चौड़ी इस प्रतिमा की पहचान डा० कठोच ने विष्णु के वैकुण्ठ रूप से की है[12]। इस मूर्ति में चर्तुर्भुज देवता को द्विभंग-स्थानक मुद्रा में प्रदर्शित किया गया है। अभय मुद्रा में प्रदर्शित उनके अगले दक्षिण हस्त में अक्षमाला शोभित है। ऊपरी बायाँ हाथ भग्न हो चुका है। शेष दोनों हाथ क्रमशः त्रिशूल पुरुष और चक्र पुरुष पर अवलम्बित हैं। कानों में कुण्डल, वक्षस्थल के बायें भाग में कौस्तुम्भ मणि, दायें कटि में वाघम्बर एवं बायें में धोती से विभुषित देवता के निचले पार्श्वों में द्विभंग मुद्रा में खड़े आयुध पुरुष एक हाथ में चांवर लिये हुये है, उनका दूसरा हाथ कट्यावलम्बित है। दायीं ओर प्रदर्शित आयुध पुरुष के मस्तक पर त्रिनेत्र का अंकन किया गया है। मूल प्रतिमा के दोनों पैरों के मध्य, पादपीठ पर करबद्ध मुद्रा में बैठी हुई एक स्त्री निरूपित है। देवता के स्कन्धों पर उनकी केश राशि छितरी हुई है। दायें स्कन्ध पर सर्प प्रदर्शित है। मध्य

मुख के पार्श्वों में पैठाणी की पूर्वोल्लिखित प्रतिमा के अनुरूप क्रमशः शिव के रौद्रमुख और वराह मुख दर्शाये गये हैं। वराह का खुला हुआ मुख और मुख के भाव रौद्र रूप का आभास कराते हैं।

पैठाणी और संग्राली ग्राम की प्रतिमाओं में मुख्यतः निम्नलिखित अन्तर दिखते हैं :-

1. पैठाणी की प्रतिमा प्रस्तर निर्मित है जबकि संग्राली की धातु निर्मित।
2. पैठाणी की प्रतिमा संग्राली ग्राम की प्रतिमा से आकार में बड़ी है।
3. संग्राली की प्रतिमा का पादपीठ पैठाणी की प्रतिमा की अपेक्षा ऊँचा है।
4. पैठाणी की हरिहर मूर्ति सामान्य प्रतिमा के रूप में निरूपित है जबकि संग्राली की प्रतिमा योनिपीठ पर शिवलिंग के मानवीकृत रूप में दर्शायी गयी है।
5. पैठाणी की प्रतिमा में अक्षमालायुक्त अगला दायाँ हाथ वरद् मुद्रा में और पिछला त्रिशूलयुक्त है जबकि संग्राली की प्रतिमा में ये हाथ क्रमशः अभय मुद्रा में और त्रिशूल पुरुष पर अवलम्बित है।
6. पैठाणी की प्रतिमा में संग्राली ग्राम की प्रतिमा की तरह आयुध पुरुष नहीं दर्शाया गया है।
7. पैठाणी की प्रतिमा के अधो पार्श्वों में क्रमशः शिव और विष्णु के वाहन नन्दी और गरुड़ निरूपित हैं जबकि संग्राली की प्रतिमा में इनका अभाव है।
8. पैठाणी की प्रतिमा में संग्राली की मूर्ति में प्रदर्शित कौस्तुभ बाघम्बर और बैठी हुई स्त्री का अंकन नहीं किया गया है।

उपर्युक्त अन्तरों के बावजूद प्रश्नगत प्रतिमाओं की मूल पृष्ठभूमि लगभग एक-सी प्रतीत होती है। शैलीगत आधार पर इन प्रतिमाओं को लगभग नवीं शती ई० में रखा जा सकता है।

II

गढ़वाल हिमालय की पूर्वोल्लिखित प्रतिमाओं के अतिरिक्त त्रिमुख हरिहर की एक अन्य प्रतिमा कश्मीर क्षेत्र से भी ज्ञात है[13]। इसका प्रथम संज्ञान प्रतापादित्य पाल ने कराया था। कालान्तर में इसका उल्लेख स्टेला क्रामरिश ने भी किया है[14]। इस मूर्ति में द्विभंग स्थानक मुद्रा में खड़े ऊर्ध्व रेतस षड्भुज देवता की कटि में कटार का प्रदर्शन उल्लेखनीय है। मूल देवता के निचले दायें पार्श्व में खड़े द्विभंग त्रिशूल पुरुष के मस्तक पर अवलम्बित अधो दक्षिण हस्त के अतिरिक्त अन्य हाथ भग्न हो चुके हैं। उनके दोनों पैरों के मध्य एक स्त्री दर्शायी गयी है। इसके मध्य दायें भाग में शिव और बायें भाग में विष्णु का निरूपण किया गया है। शिव भाग में दायें मस्तक पर तृतीय नेत्र और ऊर्ध्वलिंग सुस्पष्ट हैं। मुख्य मुख के पार्श्वों में प्रदर्शित अतिरिक्त मुख गढ़वाल हिमालय की विवेच्य प्रतिमाओं के अनुरूप हैं। कटार और छः हाथों के अतिरिक्त इस प्रतिमा के शेष लक्षण संग्राली ग्राम की मूर्ति से साम्य रखते हैं।

कश्मीर की यह प्रतिमा कर्कोटक वंश से सम्बद्ध करते हुए लगभग नवीं शती ई० की मानी गयी है[15]। हरे प्रस्तर से निर्मित इस प्रतिमा की ऊँचाई गढ़वाल की प्रतिमाओं से लगभग दो गुना (68.5 से०मी०) है। सम्प्रति यह मूर्ति बर्लिन के संग्रहालय में सुशोभित है[16]।

स्टेला क्रामरिश ने इस प्रतिमा की पहचान त्रिमुख हरिहर के रूप में करते हुए यह अभिमत व्यक्त किया है कि इस पर शिव के पंच मुख और विष्णु के चर्तुर्मुख वैकुण्ठ का प्रभाव है[17]।

III

उपर्युक्त विवरण से सुस्पष्ट है कि विवेचनाधीन प्रतिमाएँ शिव और विष्णु की संघाट (समन्वित)- हरिहर-प्रतिमाएँ हैं। किन्तु शिव के रौद्रमुख और वराहमुख का अतिरिक्त निरूपण प्रतिमा शास्त्रीय दृष्टि से समुचित समाधान चाहता है। हमारे अब तक के अध्ययन से प्रश्नगत सन्दर्भ में कोई ऐसा शिल्प शास्त्रीय ग्रन्थ उपलब्ध नहीं हो सका है जिसके आधार पर विवेच्य प्रतिमाओं के लक्षणों के अनुसार इनका सही अभिज्ञान किया जा सके। फिर भी स्कन्द पुराण के रेवा खण्ड के अन्तर्गत वाराहकल्प में उल्लिखित भगवान महेश्वर के वाराह रूप धारण करने का एक रोचक प्रसंग मिलता है[18]। प्रकारान्तर से यह प्रसंग विवेचनाधीन प्रतिमाओं की पहचान की ओर संकेत करता प्रतीत होता है।

इस कथा में भगवान महेश्वर को जगत् का संहार करने के साथ-साथ वाराह रूप धारण करके पृथ्वी का उद्धार करने का विस्तार से उल्लेख किया गया है[19]। तद्अन्तर्गत उनके इस रूप को महेश्वर महावराह कहा गया है। विवेच्य प्रतिमाएँ कदाचित् इसी प्रसंग के आधार पर निरूपित की गयी हैं। शिव का रौद्रमुख पृथ्वी के उद्धार से पूर्व उनके द्वारा किये गये संहार तथा वराह मुख महावराह रूप धारण करने के प्रतीत जान पड़ते हैं। पैरों के बीच में प्रदर्शित स्त्री को निर्विवाद रूप से पृथ्वी देवी माना जा सकता है। इस प्रकार ये तथ्य इन प्रतिमाओं की पहचान महेश्वर महावराह रूप से करने के पक्ष में हैं। डा० अवध बिहारी लाल अवस्थी ने स्कन्द पुराण की इसी कथा के आधार पर इस प्रकार की प्रतिमा का उल्लेख किया है[20]।

स्कन्द पुराण की उपर्युक्त कथा के अतिरिक्त दावड़गेर के 59वें (1280 ई०) शिलालेख में वर्णित एक स्तवन में हरिहर को पृथ्वी का उद्धार करने का उल्लेख मिलता हैं।

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डा० राकेश तिवारी,
श्री गिरीश चन्द्र सिंह,
उ० प्र० राज्य पुरातत्व संगठन, लखनऊ, उ० प्र० ।

देवगढ़ क्षेत्र की पूर्व पुराश्म कालीन संस्कृति : प्राथमिक विवरण

मक्खन लाल
सलाहुद्दीन

दक्षिणी उत्तर प्रदेश में आज से लगभग 100 वर्ष पूर्व पहली बार प्रागैतिहासिक उपकरणों की खोज की गयी थी। इसका श्रेय ला मेस्यूरिएर[1] (1860) को जाता है। जिसने इलाहाबाद जिले के टोंस क्षेत्र में पत्थर की कुल्हाड़ियाँ पायी थीं। इसके बाद थिओबाल्ड [2] (1862) ने भी बुन्देलखण्ड से बहुसंख्यक पत्थर की कुल्हाड़ियाँ (नव पाषाण कालीन) संग्रहीत कीं। तदुपरान्त काकबर्न [3] (1879), रिवेट कार्नेक [4] (1882) और कार्लाइल[5] (1883) को भी इस क्षेत्र में ऐसे उपकरण मिले। इन पुराविदों ने अपने सर्वेक्षणों के लिए बाँदा, हमीरपुर, इलाहाबाद और मिर्जापुर जनपदों का चयन किया था, किन्तु इन खोजों के बाद लगभग 50 वर्ष तक उत्तर प्रदेश में प्रागैतिहासिक संस्कृतियों के अध्ययन की दिशा में कोई उल्लेखनीय कार्य नहीं हो सका।

1939 में ज्वेनर और कृष्णास्वामी आदि[6] ने, ही टेरा एवं पैटरसन द्वारा 10 वर्ष पूर्व दिये गये सुझाव के अनुसार, मिर्जापुर जनपद की सिंगरौली घाटी[7] का सर्वेक्षण कर पाषाण कालीन उपकरणों की खोज की। उसके बाद दक्षिण उत्तर प्रदेश के वाराणसी, मिर्जापुर, इलाहाबाद, बाँदा, हमीरपुर आदि जनपदों से पाषाण कालीन संस्कृतियों से संबंधित अत्यन्त महत्वपूर्ण सामग्री प्रकाश में आ चुकी हैं[8-14]।

ललितपुर और झाँसी जनपदों में पाषाण युगीन अवशेषों की खोज के लिए पर्याप्त प्रयास नहीं किये गये हैं, जिसके कारण इन क्षेत्रों से बहुत कम प्रागैतिहासिक स्थल ज्ञात हैं। इनमें से ललितपुर[12], लहचुरा[10], देवगढ़[8], और मोठ[9] (झाँसी जनपद) उल्लेखनीय हैं। इस क्षेत्र में हुए अल्प कार्य को दृष्टिगत रखकर हमने झाँसी और ललितपुर जनपद में लगभग दो सप्ताह तक सर्वेक्षण किया। इस सर्वेक्षण में देवगढ़ और उसके आस-पास से पूर्व पुरा पाषाणकालीन ''एश्यूलीय-उपकरण'' प्राप्त हुए हैं। इसके पूर्व भी यहाँ से ऐसे उपकरण श्री मुनीश चन्द्र जोशी[9] द्वारा प्रकाश में लाये जा चुके हैं, किन्तु इनका विस्तृत विवरण उपलब्ध नहीं है। अत: यहाँ नव प्राप्त उपकरणों का विवरण प्रस्तुत किया जा रहा है। आशा है इससे इस क्षेत्र के प्रागैतिहास पर प्रकाश पड़ सकेगा।

स्थिति :-

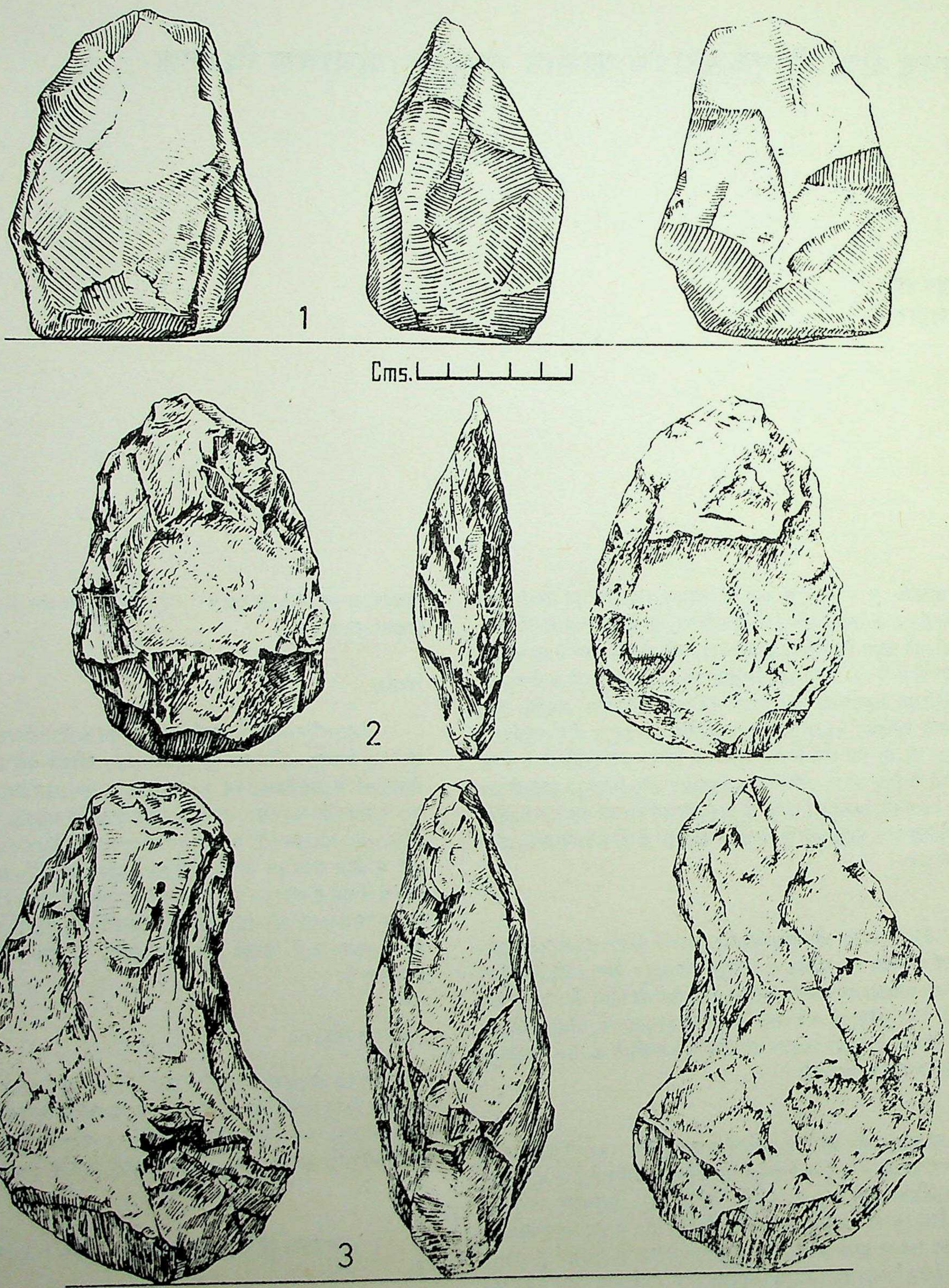
गुप्तकालीन दशावतार मन्दिर तथा बाद के जैन मन्दिर समूह के लिये सुप्रसिद्ध देवगढ़, ललितपुर से 30 कि०मी० दक्षिण-पश्चिम दिशा में, बेतवा नदी के दायें किनारे पर, अक्षांश 24° 15′ उ० तथा देशान्तर 78° 15′ पू० में स्थित है। प्रश्नगत पाषाण कालीन उपकरण मुख्यत: देवगढ़ गाँव से 1 कि०मी० पश्चिम और कर्नाली दुर्ग के पास, जैन मन्दिर समूह और बेतवा नदी के बीच के जंगल में पाये गये हैं। ये उपकरण आंशिक रूप से लाल मिट्टी में धंसे तथा भूतल पर, लगभग 300 वर्ग मीटर क्षेत्र में बिखरे हुए हैं। यह भू-भाग ऊष्ण कटिबंधीय वन से आच्छादित हैं। यहाँ से प्राप्त उपकरण उत्तम प्रकार के हैं। इनकी कुल संख्या 88 है। जिनका प्राथमिक विवरण निम्नवत् है।

उपकरण समूह :-

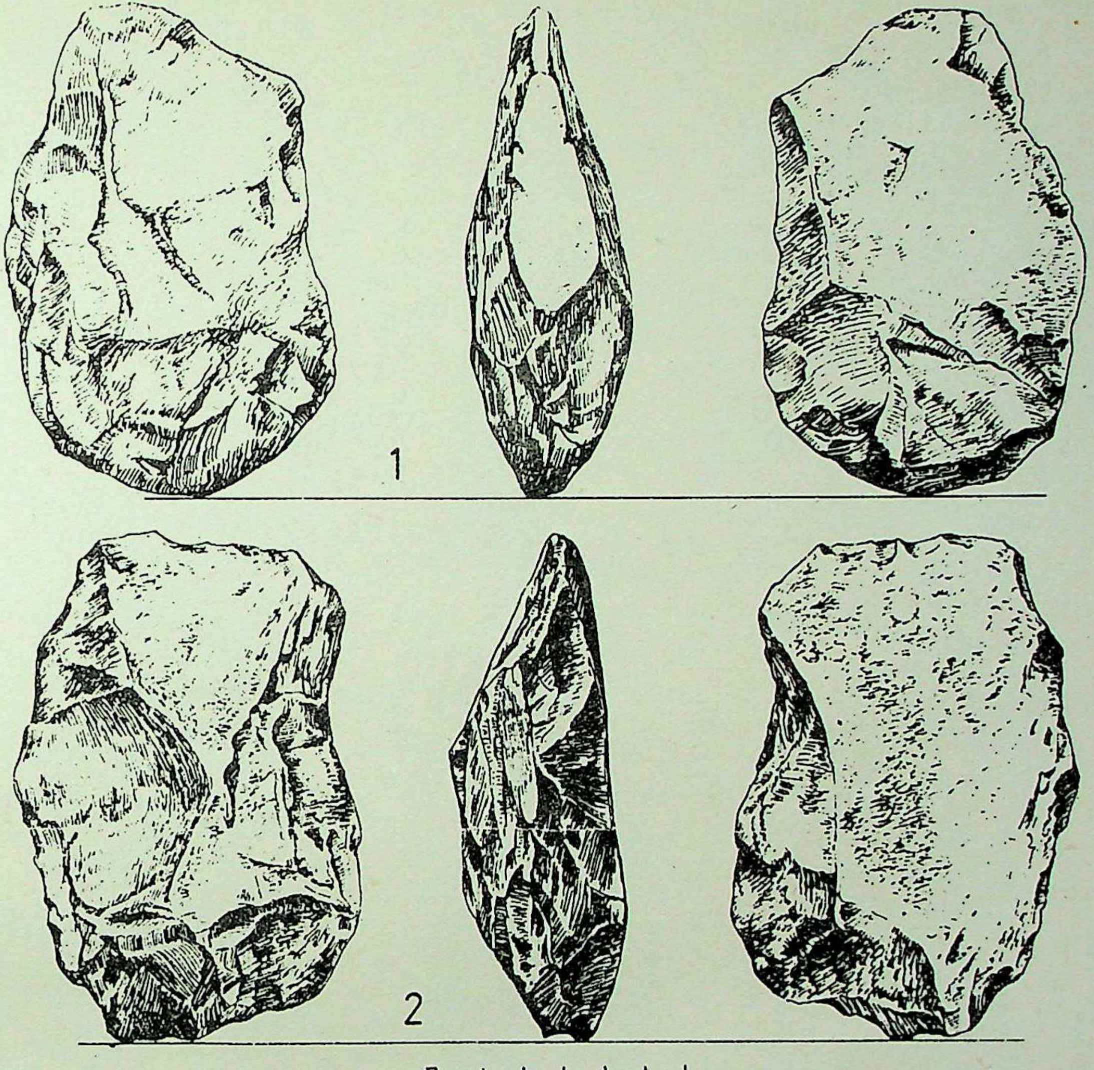
देवगढ़ से प्राप्त उपकरणों को नियमित और सामान्य समूहों में, वर्गीकृत किया जा सकता है। नियमित उपकरणों के अन्तर्गत हस्त-कुठार (हैण्ड ऐक्स), परशु (विदलक), (क्लीवर), छोलनी (स्क्रैपर), चक्राभ (डिस्क्वॉएड), कुदाल (पिक) तथा नोकीले शीर्षक (प्वाइन्ट) रखे जा सकते हैं।

1. **हस्त कुठार (हैण्ड ऐक्स)** (रेखाचित्र 1, सं० 1-3, चित्र 1, सं० 1-5)

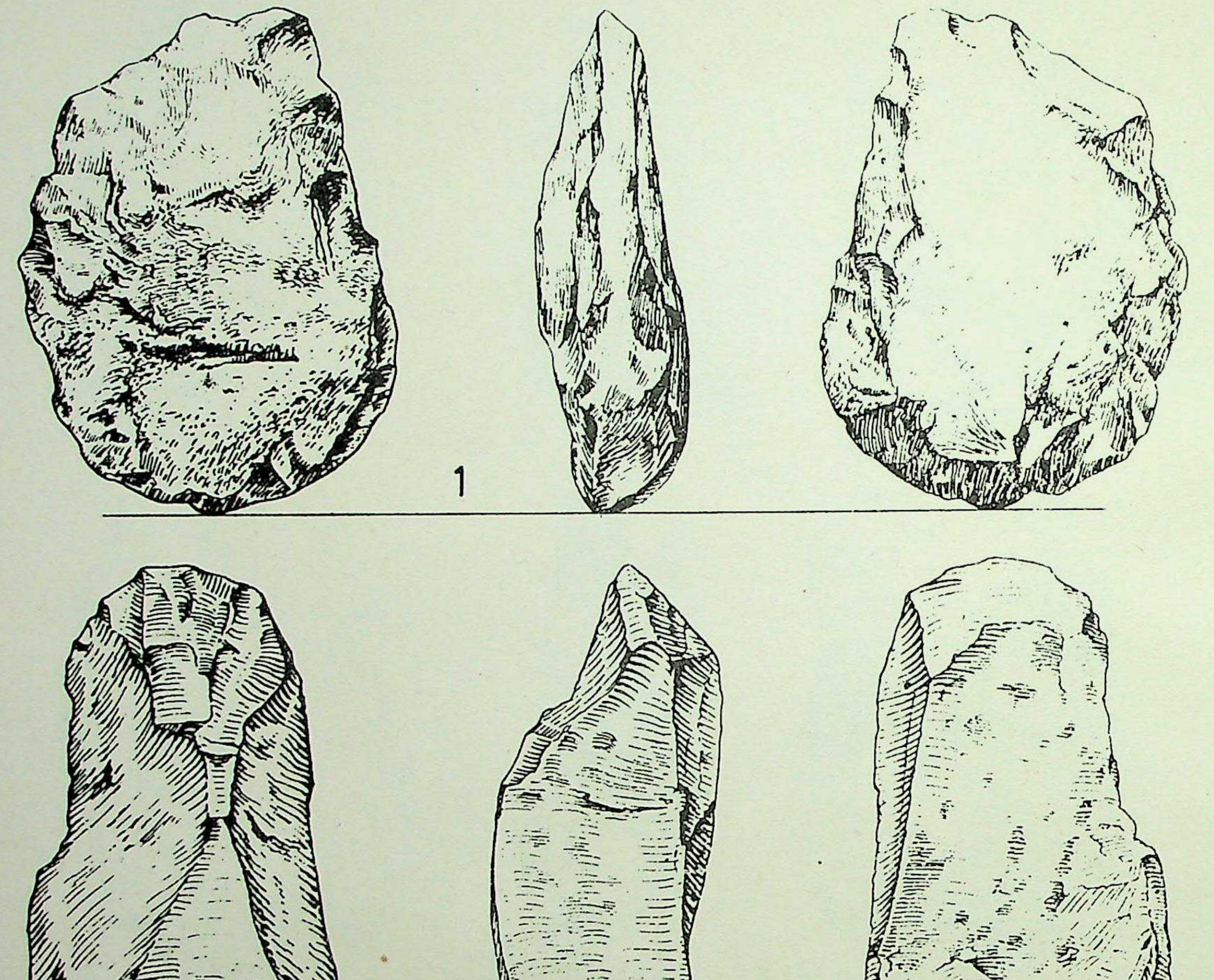
देवगढ़ से प्राप्त उपकरणों में 25 (28%) हस्त कुठार हैं जिन्हें आकार के अनुसार निम्नवत् वर्गीकृत कर उनके सामने उनकी संख्या का उल्लेख किया जा रहा है।



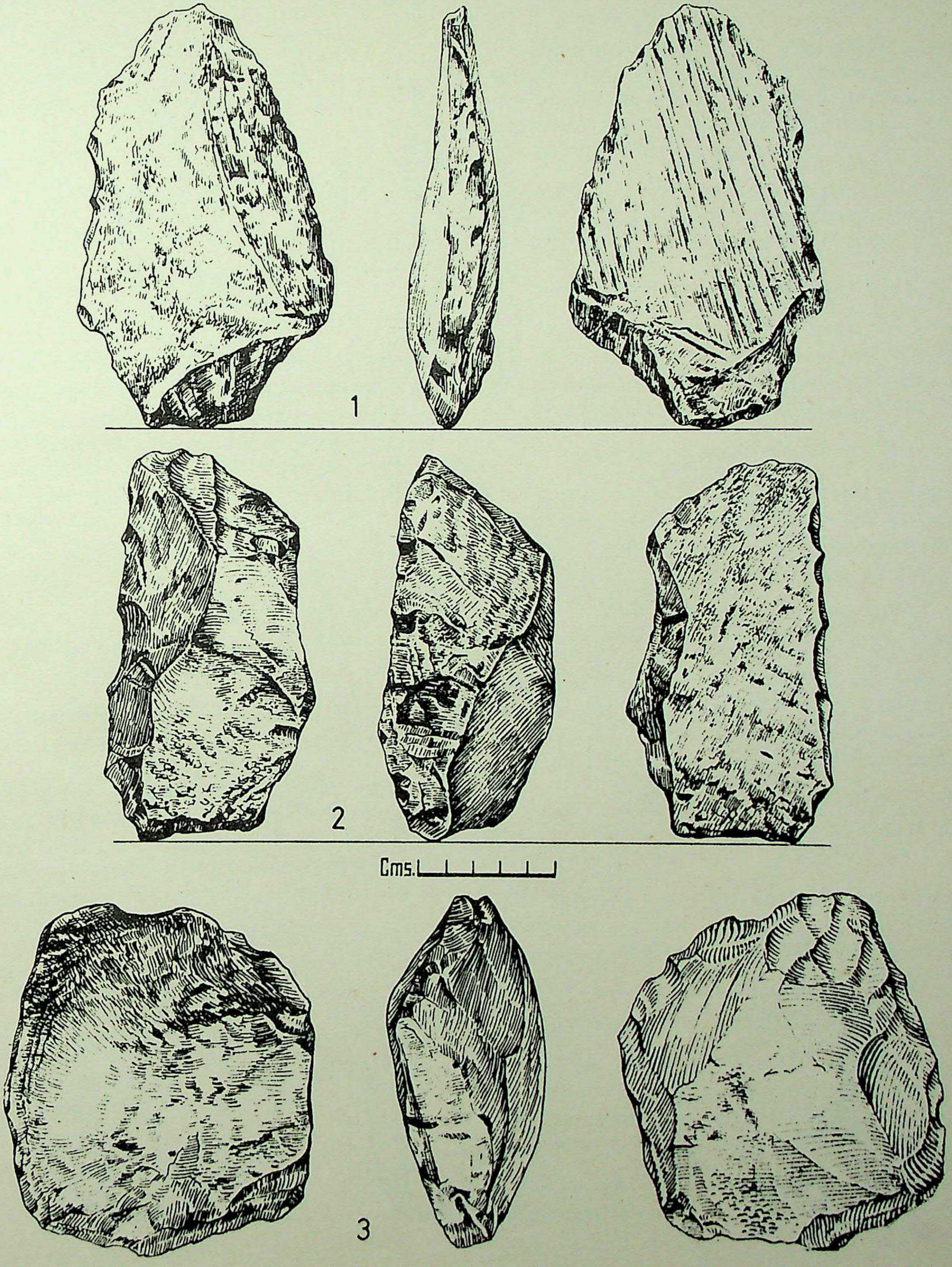
रेखाचित्र 1 हस्त कुठार (हैण्डेक्स) देवगढ़, ललितपुर।



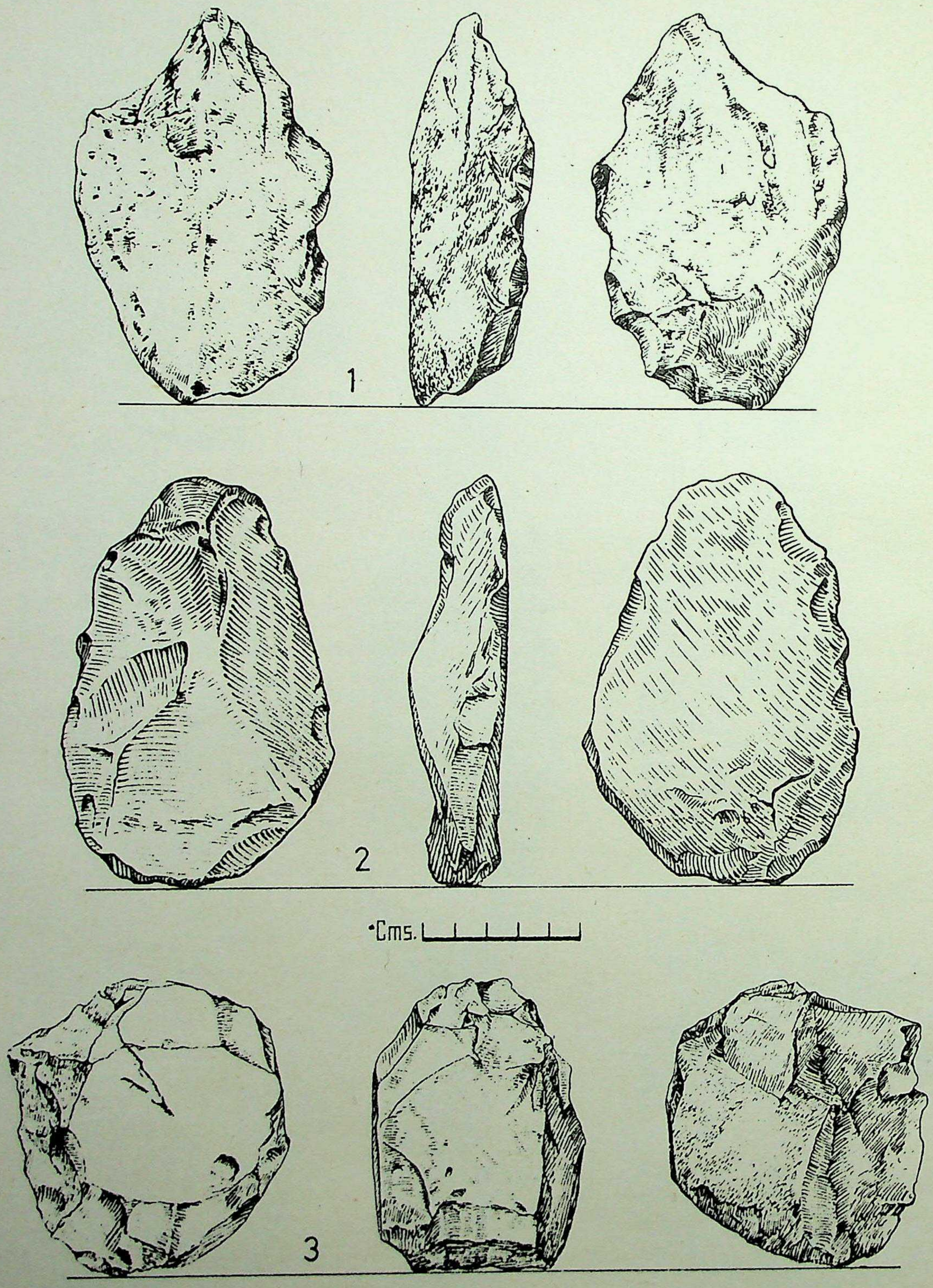
रेखाचित्र 2 परशु (क्लीवर), देवगढ़, ललितपुर।



रेखाचित्र 3:1 परशु (क्लीवर); 2. कुदाल (पिक); 3. क्रोड (कोर), देवगढ़, ललितपुर।



रेखाचित्र 4 छोलनी (स्क्रेपर), देवगढ़, ललितपुर।



रेखाचित्र 5:1 नोकीला शीर्षक अथवा भल्लक (प्वाइन्ट); 2. अश्म फलक (फ्लेक); 3. क्रोड (कोर), देवगढ़, ललितपुर।

क्रम सं०	आकार	संख्या
1.	नाशपाती के आकार के	5
2.	लम्बे आकार के	5
3.	हृदयाकार	4
4.	अण्डाकार	4
5.	त्रिकोणीय	4
6.	भालाकार	1
7.	बादाम के आकार के	1
8.	टूटा हुआ, अनिश्चित आकार	1
	कुल	25

20 हस्त कुठार बड़े अश्म फलक पर बने हैं, जबकि 5 शिला शकल (नोड्यूल) या क्रोड (कोर) पर बने हैं। अश्म फलक पर बने उपकरण चोट देने के स्थान (स्ट्राकिंग प्लेटफार्म) के साथ अधिकतम कोण बनाते हैं। कुछ उदाहरणों के अतिरिक्त, अश्म फलक दोनों ओर कम गढ़े हुए हैं। इसके कारण प्रत्येक उपकरण पर प्राकृतिक सतह (नैचुरल सर्फेस) मौजूद हैं। क्रोड पर बने उपकरण दोनों ओर से गढ़े हुए हैं, परन्तु कुन्दे (बट) पर प्राकृतिक सतह (नैचुरल सर्फेस) मौजूद है। सभी उपकरणों के बीच के सेक्शन उन्नतोदर हैं। इन उपकरणों की माप (लम्बाई, चौड़ाई और मोटाई) निम्नवत् है।

अधि. ल॰ 15.0 से.मी., अधि. चौ॰ 10.7 से.मी., अधि. मो॰ 6.4 से.मी., न्यून. ल॰ 9.6 से.मी., न्यून. चौ॰ 6.2 से.मी., न्यून. मो॰ 2.1 से.मी., औ. ल॰ 11.7 से.मी., औ. चौ॰ 8.2 से.मी., औ. मो॰ 3.9 से.मी.

2. **परशु (क्लीवर)** रे०चि० 2, सं० 1-3; रे०चि० 3; सं० 1, चित्र सं० 2, 1-4

देवगढ़ के उपकरण समूह में 8 परशु हैं। इनमें से दो अनियमित अश्म फलक पर और शेष "एण्ड फलक" पर बने हैं। ये फलक कम गढ़े हुए हैं। आकार के अनुसार 7 उपकरण U आकार तथा एक V आकार का है। इनमें से एक तिरछी और कुछ सीधी धार वाले हैं। चार उपकरणों की धार टूटी हुई है। इनके सेक्शन चतुर्भुज हैं। इनकी माप निम्नवत् है।

अधि. ल॰ 15.7 से.मी., अधि. चौ॰ 9.2 से.मी., अधि. मो॰ 5.1 से.मी., न्यू. ल० 7.0 से.मी., न्यू. चौ॰ 7.0 से.मी., न्यू. मो॰ 3.7 से.मी., औ. ल॰ 12.4 से.मी., औ. चौ॰ 8.2 से.मी., औ. मो॰ 4.2 से.मी.

3. **छोलनी (स्क्रैपर)** रे० चि० 4, सं० 1-3; चि० 3, सं० 1-5)

प्रश्नगत उपकरण समूह में 23 छोलनी हैं। इनके घर्षक किनारों के आधार पर इन्हें विभिन्न वर्गों में बाँटा गया है—

1.	**पार्श्व छोलनी (साइड स्क्रैपर)**	
	(क) नतोदर (कानकेव)	5
	(ख) उन्नतोदर (कानवेक्स)	1
	(ग) सीधे	10
2.	**शीर्ष छोलनी** (एण्ड स्क्रैपर)	3
3.	"डाइवर्स"	2
4.	सीधा-नतोदर (स्ट्रैट-कम-कानकेव)	1
5.	ट्रांसवर्स	1

सभी उपकरण अश्म फलक पर बने हैं, जो आकार में अनियमित तथा नियमित दोनों प्रकार के हैं। एक पार्श्व छोलनी चाकू की तरह भी प्रयोग में लायी जा सकती है। इनमें तैयार तथा साधारण चोट देने के स्थल, (स्ट्राइकिंग प्लेटफार्म) मौजूद हैं। इनमें घर्षक किनारे बड़े अथवा तिरछे दोनों प्रकार के हैं। उपकरणों की माप निम्नवत् है।

अधि. ल॰ 16.6 से.मी., अधि. चौ॰ 15.3 से.मी., अधि. मो॰ 5.5 से.मी., न्यू. ल॰ 8.9 से.मी., न्यू. चौ॰ 7.3 से.मी., न्यू. मो॰ 2.1 से.मी., औ. ल॰ 12.9 से.मी., औ. चौ॰ 4.5 से.मी., औ. मो॰ 3.6 से.मी.

4. **नोकीले शीर्षक (प्वाइन्ट)** (रे० चि० 5, सं० 1; चित्र 3, सं० 6)

देवगढ़ के उपकरण समूह में केवल एक नोकीला शीर्षक (प्वाइन्ट पाया गया है। इसका निर्माण अनियमित फलक पर किया गया है। इसमें ऊपरी भाग को दाँयें और बाँयें ओर से बारीक फलक निकाल कर बनाया गया है। इसकी माप 12.5 (ल०)× 8.0 (चौ०)×3.6 से०मी० (मो०) है।

5. **कुदाल (पिक)** (रे० चि० 3, सं० 2; चित्र 2, ; सं० 5)

देवगढ़ से इस प्रकार का एक ही उदाहरण पाया गया है। इसे लम्बे व मोटे फलक पर बनाया गया है। इसके पृष्ठ बाग पर तीन बड़े फलक के निशान हैं। उत्खनक नोक तीन छोटे फलक निकाल कर बनायी गयी हैं। इसका आकार उल्टे ∩ की तरह और माप 17.8 से०मी० (ल०)× 8.9 (चौ०)×5.0 से०मी० (मो०) है।

6. **चक्राभ क्रोड (डिस्कॉएड)** (रे० चि० 3; सं० 3; चित्र 4, सं० 1-3)

इस वर्ग के 3 उदाहरण पाये गये हैं। इन्हें चारों ओर से गढ़ा गया है। इन पर प्राकृतिक तल और लघु-फलकों के निशान भी मौजूद हैं। सभी उपकरणों में चारों ओर धार बनी हुई हैं। ऐसा प्रतीत होता है कि ये उपकरण पहले क्रोड थे बाद में हथियार (टूल) के रूप में प्रयोग किये गये होंगे।

अधि॰ ल॰ 11.0 से.मी., अधि. चौ॰ 9.8 से.मी., अधि. मो॰ 7.7 से.मी., न्यू. ल॰ 9.1 से.मी., न्यू. चौ॰ 8.1 से.मी., न्यू. मो॰ 3.5 से.मी., औ. ल॰ 9.9 से.मी., औ. चौ. 8.9 से.मी., औ. मो. 5.4 से.मी.

ऐसे उपकरण भी हैं जिन्हें गढ़ कर किसी विशेष प्रकार के हथियार बनाने का प्रयत्न नहीं किया गया है, परन्तु यह भी मानव निर्मित हैं, इन्हें साधारण उपकरण के रूप में वर्गीकृत किया गया है। जिनका विवरण निम्नवत् है।

1. **अश्म फलक ('फ्लेक')**, (रेखाचित्र 5; सं० 2; चित्र 5, सं० 1-4)

इस उपकरण के 12 नमूने पाये गये हैं। इनमें 6 अनियमित तथा 6 शीर्ष फलक हैं। इनमें साधारण तथा तैयार दोनों प्रकार के चोट देने के स्थान (स्ट्राइकिंग प्लेटफार्म) हैं। परन्तु पृष्ठ पर बहुत कम फलकों के चिन्ह हैं। माप निम्नवत् है।

अधि. ल॰ 15.7 से.मी., अधि. चौ॰ 12.5 से.मी., अधि. मो॰ 5.4 से.मी., न्यू. ल॰ 10.6 से.मी., न्यू. चौ॰ 6.9 से.मी., न्यू. मो० 2.4 से.मी., औ. ल० 12.4 से.मी., औ. चौ० 8.7 से.मी., औ. मो० 3.5 से.मी.

6. **क्रोड (कोर)** (रे० चि० 5; सं० 3; चित्र 5, सं० 4-6)

इस वर्ग में 5 नमूने हैं। ये आकार के अनुसार गोल, चौकोर तथा त्रिकोण हैं। ये उपकरण छोटे तथा पूरी तरह प्रयोग में लाये गये हैं। इन पर फलकों के चिन्ह छोटे, उथले तथा गहरे हैं। इनकी माप निम्नवत् हैं।

अधि. ल० 10.8 से.मी., अधि. चौ० 9.2 से.मी., अधि. मो० 6.7 से.मी., न्यू. ल० 9.3 से.मी., न्यू. चौ० 7.8 से.मी., न्यू. मो० 6.0 से.मी., औ. ल० 9.8 से.मी., औ. चौ० 8.5 से.मी., औ. मो० 6.3 से.मी.

3. **शिला शकल (नोड्यूल्स)**

इस प्रकार के कुल 7 नमूने पाये गये हैं, जिनमें गढ़न केबहुत कम चिन्ह हैं। ये क्रोड निर्माण में भी उत्पन्न हो सकते हैं अथवा यह भी सम्भव है कि दो एक फलक निकालने के बाद इन्हें फेंक दिया गया हो। इनकी माप निम्नवत् है।

अधि. ल० 13.1 से.मी., अधि. चौ० 10.5 से.मी., अधि. मो० 7.0 से.मी., न्यू. ल० 9.1 से.मी., न्यू. चौ० 5.1 से.मी., न्यू. मो० 4.0 से.मी., औ. ल० 10.6 से.मी., औ. चौ० 8.7 से.मी., औ. मो० 5.4 से.मी.

निष्कर्ष :-

देवगढ़ के उपकरण समूह में हस्त कुठार, परशु, छोलनी, भल्लक, (प्वाइन्ट), कुदाल, चक्राभक्रोड, अश्मफलक, क्रोड तथा शिला शकल सम्मिलित हैं। लाक्षणिक रूप में ये उपकरण अनगढ़ तथा असमान आकार के हैं। इन्हें मोटे तथा बड़े फलकों पर निर्मित किया गया है। हस्त कुठार क्रोड पर भी बने हैं। अधिकांश उपकरणों में प्राकृतिक पृष्ठ (नैचुरल सर्फेस) मौजूद हैं। शंक्वाकार उभार (बल्ब आफ परकसन) तथा बड़े फलकों के चिन्ह तथा साधारण अथवा तैयार किये हुए चोट देने के स्थान (स्ट्राइकिंग प्लेटफार्म), भी मौजूद हैं। इस प्रकार हम देखते हैं कि इन उपकरणों को बनाने में भारी वजन के हथौड़े तथा नियंत्रित हथौड़ा विधि का प्रयोग किया गया है। इसके अतिरिक्त शिला शकल को शिला शकल पर पटक कर तथा प्रत्यक्ष चोट विधि का प्रयोग भी किया गया होगा। इस प्रकार हम कह सकते हैं कि यह उपकरण समूह आरम्भिक एवं अपरिष्कृत कार्य प्रणाली का प्रदर्शन करते हैं।

जहाँ तक दक्षिण उत्तर प्रदेश में पाषाण काल के उपकरणों का प्रश्न है, इनमें चार प्रकार के समूह देखने में आते हैं।[8]

1- समूह सं० 1 :- इसमें अधिक संख्या में गोलाश्म उपकरण देखने में आते हैं तथा मुख्य स्थल गोपीपुर और निही हैं।

2- समूह सं० 2 :- इस समूह में बहुत कम अथवा नहीं के बराबर गोलाश्म उपकरण हैं। मुख्य स्थल ललितपुर, परसिद्धिया तथा महुवागढ़ हैं।

3- समूह सं० 3 :- इसमें अधिक मात्रा में अश्यूलीय उपकरण है तथा मुख्य स्थल निही, सिंगरौली, नाला और ललितपुर हैं।

4- समूह सं० 4 :- इसमें मुख्य स्थल गोपीपुर और महुवागढ़ है जहां प्राप्त अधिकांश उपकरण परशु हैं।

इस क्षेत्र में विशेष बात यह है कि एश्यूलीय उपकरण समूहों के बावजूद इनमें एकरूपता नहीं है। परन्तु आकार प्रकार को देखते हुए देवगढ़ उपकरण समूह को ललितपुर, सिंगरौली तथा निही समूह, जिनमें हस्त कुठार उपकरणों का बाहुल्य है, में रखा जा सकता है।

अफ्रीका की तुलना में भारतवर्ष में एश्यूलीय उपकरण समूह को भूगर्भीय परतों के आधार पर प्रारम्भिक तथा परवर्ती एश्यूलीय उपकरण समूह में विभक्त करना सम्भव है, तथापि आकारानुसार यह उपकरण समूह दो वर्गों में विभाजित किया गया है– प्रारम्भिक एश्यूलीय तथा परवर्ती एश्यूलीय उपकरण समूह[15]। ललितपुर, आदमगढ़, कुलैना, महादेव पिपरिया, चिर्की-नेवासा, अनंगवाडी तथा हुँसगी प्रारम्भिक एश्यूलीय समूह के उत्तम उदाहरण हैं तथा भीम बेटका गुफा एफ-23 और एफ-24 तथा महादेव पिपरिया में "क्लिफ ग्रैवेल" के उपकरण इत्यादि परवर्ती एश्यूलीय समूह के उदाहरण हैं[15]। इस बात की पुष्टि बाद में सांख्यिकीय माप द्वारा, जो नेवासा के हस्त कुठारों पर की गयी है, भी होती है। इस माप से ज्ञात हुआ है कि बाद के एश्यूलीय उपकरणों से प्रारम्भिक उपकरण अधिक अनगढ़ हैं[16-18]।

उपर्युक्त आंकड़ों के आधार पर देवगढ़ के उपकरण प्रारम्भिक एश्यूलीय वर्ग के प्रतीत होते हैं। इसकी पुष्टि प्रो० वीरेन्द्र नाथ मिश्र तथा प्रो० बृजवासी लाल ने भी अलीगढ़ में रखे उपकरणों के परीक्षण के बाद की है।

देवगढ़ के उपकरण संख्या में कम हैं। अतः सांख्यिकी मापदण्ड कठिन है। इसलिए पूर्वानुमान के आधार पर कोई ठोस निष्कर्ष व्यक्त करना समुचित नहीं है। आशा है कि अधिक संख्या में उपकरण एकत्र करने के पश्चात् तथा सांख्यिकी माप के द्वारा ही हम कोई ठोस निष्कर्ष निकाल सकेंगे।

रेखा चित्र सं० 1. **हस्त कुठार**

सं० 1. नाशपाती के आकार का यह हस्त कुठार शिला शकल पर बना हुआ है। ऊपरी भाग दोनों ओर से गढ़ा हुआ है। कुन्दा अनगढ़ तथा आधार सीधा है।

सं० 2. यह अण्डाकार क्रोड पर बना है। पृष्ठ भाग पर ऊपर की ओर गढ़ा हुआ तथा भीतर की ओर पूरा तल गढ़ा हुआ है। कुन्दे पर प्राकृतिक तत्व मौजूद है।

सं० 3. यह बड़े क्रोडनुमा फलक पर बना तथा लम्बा और गुर्दाकार है। इसे दोनों ओर से गढ़ा गया है। दोनों ओर प्राकृतिक तल भी मौजूद हैं।

रेखाचित्र सं० 2. **परशु**

सं० 1. समानान्तर किनारों वाला परशु है। इसकी धार टूटी हुई है। पृष्ठ भाग अच्छी प्रकार से गढ़ा हुआ है। भीतर का तल केवल किनारों से गढ़ा हुआ है। कुन्दा U आकार का है। यह उपकरण फलक पर निर्मित है।

सं० 2. यह भी समानान्तर किनारों तथा सीधी धार वाला है। पृष्ठ भाग पर अच्छी तरह से गढ़ा हुआ है। भीतरी तल पर अधिक कार्य नहीं हुआ है। कुन्दा U आकार का है। यह भी फलक पर निर्मित है।

सं० 3. यह समानान्तर किनारे तथा तिरछी धार वाला परशु है। किनारों पर छोटे-छोटे फलक निकले हुए हैं। फलक पर निर्मित है।

रेखा चित्र सं० 3.

सं० 1. यह समानान्तर किनारों वाला परशु है। इसकी धार टूटी हुई है। कुन्दा U आकार का है। फलक पर निर्मित है।

सं० 2. **कुदाल (पिक)**

यह लम्बे मोटे फलक पर बना है। पृष्ठ की ओर तथा उत्खनक नोंक पर तीन-तीन फलकों के चिन्ह हैं। भीतरी तल पर कार्य नहीं हुआ है।

सं० 3. **चक्राश्म क्रोड (डिस्कॉएड)**

यह उपकरण गोल तथा चिपटा है। इसके दोनों तरफ किनारों सहित छोटे फलकों के चिन्ह हैं परन्तु प्राकृतिक तल भी मौजूद हैं।

रेखा चित्र सं० 4. **छीलनियाँ (स्क्रेपर)**

सं० 1. यह शीर्ष फलक पर बना है। घर्षक किनारा जो कि सीधा है एक ही तरफ है। इसके पृष्ठ पर प्राकृतिक तल मौजूद हैं तथा भीतरी तल पर भी केवल घर्षक किनारे पर ही द्वितीयक कार्य है।

सं० 2. यह उपकरण आयताकार शिला शकल पर बना है। घर्षक किनारा एक ओर है तथा हलके फलक निकाल कर बनाया गया है। दूसरा किनारा मोटा है जो पकड़ने के लिए अधिक उपयोगी है। पृष्ठ तथा भीतरी तल प्राकृतिक हैं।

सं० 3. यह मोटे तथा वर्गाकार फलक पर बना है। इसमें घर्षक किनारे तीन ओर हैं।

रेखा चित्र सं० 5. **नोकीले शीर्षक (प्वाइन्ट)**

सं० 1. उपकरण अनियमित फलक पर बना है। इसका ऊपरी भाग दाहिने तथा बाँयें ओर से छोटे फलक निकाल कर नुकीला बनाया गया है।

सं० 2. फलक :- यह लम्बा अश्मफलक है। पृष्ठ भाग पर कुछ छोटे फलकों के चिन्ह हैं। भीतरी तल पर द्वितीयक कार्य नहीं किया गया है।

सं० 3. क्रोड :- यह चारों ओर तथा ऊपर और भीतर से गढ़ा हुआ है तथा उस पर छोटे और गहरे फलकों के चिन्ह मौजूद हैं। परन्तु, कुछ प्राकृतिक तल भी मौजूद हैं।

आभार :- इस लेख के उत्कृष्ट रेखा चित्रों तथा छायाचित्रों के लिए हम क्रमशः श्री अनीस अल्वी एवं श्री गुलाम मुज्तबा के आभारी हैं।

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डा० मक्खन लाल, डा० सलाहुद्दीन
अलीगढ़ मुस्लिम विश्वविद्यालय, अलीगढ़

रीठेश्वर महादेव की बुद्ध प्रतिमा

कृष्ण कुमार सिंह

भारत और अन्य देशों में एक समय बौद्ध धर्म के व्यापक प्रसार की जानकारी सुज्ञात है। एक समय इसका प्रभाव पूर्व में सुदूर जापान, उत्तर में चीन और मंगोलिया, पश्चिम में अफगानिस्तान और दक्षिणी सोवियत यूनियन तथा दक्षिण में लंका तक जा पहुँचा। इस विस्तृत क्षेत्र में बौद्ध मतावलम्बियों ने अनेकानेक स्तूप, चैत्य और विहार बनवाये जो आज हमें इस धर्म की तत्कालीन लोकप्रियता का परिचय कराते हैं।

तिब्बत और चीन तक बौद्ध धर्म का प्रचार करने वाले परिव्राजक हिमालय की दुर्गम ऊँचाइयों, बर्फिली घाटियों और अन्य असाध्य कठिनाइयों का सामना करते हुए उस पार पहुँचे थे जिसके कारण कश्मीर से अरुणाचल तक किसी समय बौद्धों के अनेक मठ स्थापित हुए। कश्मीर विशेषकर लद्दाख, हिमाँचल, नेपाल, सिक्किम, भूटान और अरुणाँचल इनके केन्द्र बने हुए हैं। स्वाभाविक रूप से उत्तर प्रदेश के गढ़वाल और कुमाऊँ मण्डलों के भी उस समय चली बौद्ध लहर के प्रभाव में रहे होने की पूर्ण सम्भावनाएँ हैं। लेकिन वर्तमान समय में इस क्षेत्र से तद्‌सम्बन्धी अत्यल्प साक्ष्य ही उपलब्ध हो सके हैं।

पूर्व में राहुल सांकृत्यायन निवेदिता, पातीराम[1] आदि विद्वानों ने उत्तरकाशी, बद्रीनाथ, तुंगनाथ, लाता, माणा, श्रीनगर, (पौड़ी गढ़वाल) और बागेश्वर से बौद्ध प्रतिमायें मिलने का उल्लेख किया है। इनके अतिरिक्त अल्मोड़ा जनपद में जखेटा से भी एक प्रतिमा प्रकाश में आ चुकी है। गोपेश्वर की मूर्ति के धर्मचक्र प्रवर्तन मुद्रा में रहे होने की सम्भावना व्यक्त की गयी है।[2] निवेदिता के अनुसार अगस्त्यमुनि में बौद्ध शिला फलक थे। बागेश्वर मन्दिर के भीतर की ओर एक पेड़ के नीचे रखी भग्न प्रतिमाओं में भी बुद्ध की एक प्रस्तर प्रतिमा रखी हुई है। यद्यपि इसका सम्मुख भाग उर्ध्वाधर रूप में भग्न हो चुका है, फिर भी उसके आकार से यह सुस्पष्ट है कि यह मूर्ति भूमि-स्पर्श मुद्रा में बैठे हुए भगवान बुद्ध ही होगी। अल्मोड़ा के जखेटा स्थल से पाई गई प्रतिमा बौद्ध देवी तारा की है।[3] इस पर नेपाल और तिब्बत की कला का प्रभाव दिखता है। माणा और लाता (जनपद चमोली) एवं बाड़ाहाट (उत्तरकाशी) से धातु निर्मित बौद्ध प्रतिमाओं के विषय में जानकारी उपलब्ध है।[4] श्रीनगर (गढ़वाल) से मिली एक प्रतिमा को अवलोकितेश्वर की प्रतिमा के रूप में पहचाना गया है।[5] प्रतिमाओं के रूप में मिले बौद्ध साक्ष्यों के अतिरिक्त मुख्य हिमालय क्षेत्र में तालाचट्टी (जनपद चमोली) में स्थित बौद्ध स्तूप उल्लेखनीय हैं।[6] इस प्रकार ये साक्ष्य यदा-कदा प्रकाश में आकर हिमालय के इस भू-भाग में भी बौद्ध प्रभाव का कुछ प्रमाण प्रस्तुत करते हैं। हाल ही में अल्मोड़ा से प्रकाश में आयी एक अन्य बौद्ध मूर्ति (चित्र सं० 1) से ऐसे साक्ष्यों में एक और बढ़ोत्तरी हुई है।

प्रश्नगत प्रतिमा उ० प्र० राज्य पुरातत्व संगठन की क्षेत्रीय पुरातत्व इकाई अल्मोड़ा द्वारा कुमाऊँ मण्डल में कराये जा रहे सुनियोजित सर्वेक्षण अभियान के अन्तर्गत अल्मोड़ा जनपद की गगास घाटी से प्रकाश में आयी है। इसके प्राप्ति स्थल रीठेश्वर महादेव मन्दिर तक पहुँचने के लिए रानीखेत-मासी मोटर मार्ग पर स्थित किमतोली नामक स्थान से लगभग 2 कि०मी० पैदल चलना पड़ता है। गगास नदी के दायें तट पर स्थित इस देवालय के प्रांगण में अनेक प्राचीन प्रस्तर प्रतिमाएँ रखी हुई हैं। पीपल के वृक्ष के नीचे रखी हुई यह प्रतिमा स्थानीय ग्रामीणों द्वारा सामान्य रूप में पूजित हैं।

भूरे प्रस्तर से निर्मित यह प्रतिमा लगभग 35 से०मी० ऊँची तथा 30 से०मी० चौड़ी है। इसका मस्तक और ऊपरी दायाँ पार्श्व भग्न हो चुका है। अवशिष्ट भाग में दोनों पार्श्वों में विपरीत दिशाओं में मुख करके बैठे हुए सिंहों से युक्त पीठिका पर पूर्ण पुष्पित पद्म के ऊपर योगासन में विराजमान द्विभुज बुद्ध के बायें स्कन्ध पर एकांश चीवर दर्शनीय है। उनका दायाँ हाथ भूमि-स्पर्श मुद्रा में और बायाँ पैरों पर अवलम्बित है। उनके पार्श्वों में स्त्री-पुरुष आकृतियाँ निरूपित हैं। आसन के नीचे दोनों सिंहों के मध्य में भी एक स्त्री आकृति का निरूपण किया गया है। शैलीगत आधार पर इस प्रतिमा को लगभग 12वीं शती ई० से सम्बद्ध किया जा सकता है।

रानीखेत क्षेत्र से किसी बौद्ध प्रतिमा का प्रकाश में आने का यह पहला उदाहरण है। इसके यहाँ प्राप्त होने से कई स्वाभाविक प्रश्न उत्पन्न होते हैं।

यथा– यह प्रतिमा कहाँ स्थापित थी? यदि प्राप्ति स्थल पर ही तो इसका सन्दर्भ क्या था? हो सकता है यह कहीं और से लाई गई हो, तो वह स्थल कहाँ है? कदाचित् इनका उत्तर भविष्य के सर्वेक्षणों/शोध कार्यों से प्राप्त हो सकेगा।

उल्लेखनीय है कि उत्तरांचल से प्रकाश में आई पूर्वोलिखित बौद्ध प्रतिमाओं में से रीठेश्वर महादेव सहित बागेश्वर, तुंगनाथ और कदाचित, लाता की प्रतिमायें भूमि-स्पर्श मुद्रा में बैठे हुए बुद्ध की हैं, जबकि गोपेश्वर संग्रह की प्रतिमा धर्मचक्र प्रवर्तन मुद्रा में है।

इस प्रकार उपलब्ध साक्ष्यों से ऐसा प्रतीत होता है कि इस क्षेत्र में बुद्ध की भूमि स्पर्श मुद्रा वाली प्रतिमायें अधिक प्रचलित रही होंगी।

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डा० कृष्ण कुमार सिंह
उ० प्र० राज्य पुरातत्व संगठन, रोशनुद्दौला कोठी, कैसरबाग, लखनऊ

इन्द्र वैकुण्ठ प्रतिमा : पलेठी

राकेश कुमार श्रीवास्तव,
बुद्धि प्रकाश बड़ौनी

टिहरी देवप्रयाग मोटर मार्ग पर स्थित हिंडोलाखाल से लगभग 5 कि०मी० की दूरी पर पट्टी खास के अन्तर्गत पलेठी नामक गाँव स्थित है।

गाँव के पूर्वी छोर तथा स्थित फांसड़ा शैली के देवालयों, वहाँ पर उपलब्ध प्राचीन पाषाण प्रतिमाओं तथा पुष्यमूति वंश से सम्बन्धित शिलालेख का विवरण तो पहले ही प्रकाशित हो चुका है।[1] ये सभी मन्दिर लगभग 7वीं शती ई० में निर्मित माने जने के साथ-साथ उत्तराखण्ड के प्राप्त देवालयों में प्राचीनतम् हैं।

वर्तमान समय में मन्दिरों की सफाई व अनुरक्षण कार्य के अन्तर्गत विभिन्न प्रतिमाओं के साथ-साथ भगवान विष्णु की 77×37×15 सें०मी० माप की एक विलक्षण प्रतिमा प्रकाश में आई है (चित्र सं०- 1)। इस प्रतिमा में वृत्ताकार प्रभामंडल का बाहरी भाग वृत्ताकार मनकों एवं मणिबन्ध पट्टियों के द्वारा अलंकृत है। विष्णु के सिर के पीछे दोनों पार्श्वों में प्रभामंडल पर गज एवं वराह मुख अंकित हैं। गज की सूड़ ऊपर की ओर दर्शायी गयी है। विष्णु अलंकृत किरीट मुकुट, लम्बी स्कन्धों तक लटकती केश राशि, त्रिवलयी ग्रीवा, तीन मनकों द्वारा निर्मित कर्णकुण्डल, एकावलि, यज्ञोपवीत, किंकणिका, कटिसूत्र, घुटनों तक प्रदर्शित अधोवस्त्र (कटिवास),बाजूबन्ध, कंकण तथा पद्मयुक्त वैजयन्तीमाल से सुशोभित हैं। (पद्मवनमाला) चतुर्भुज विष्णु का दायाँ निचला हाथ वरद् मुद्रा में है, तथा हथेली पर पद्म का अंकन शोभायमान है **(शंखचक्र गदापाणिं पद्महस्तं महाप्रभुम्)**[2]। दायाँ ऊपरी हाथ अलंकृत चक्र के ऊपर अवस्थित है। चक्र के अंकन के साथ-साथ चक्रपुरुष की उपस्थिति अवलोकनीय है। चक्र-पुरुष, कुंचित केश, कर्णकुण्डल, एकावलि, बाजूबन्ध, कंकण तथा अधोवस्त्र से अलंकृत करबद्ध मुद्रा में द्विभंग खड़े हैं। विष्णु के ऊपरी हाथ में शंख शोभित है। शंख का पिछला भाग ऊपर तथा प्रणाली हाथ में अवस्थित है। विष्णु का चौथा हाथ, कुंडल, कंकण तथा अधोवस्त्र से सज्जित द्विभंग मुद्रा में खड़ी गदा देवी के ऊपर अवस्थित है। नीचे पाद पीठ पर गरुड़ का अंकन दर्शनीय है।

साधारणतया वैकुण्ठ विष्णु की जो भी प्रतिमायें उत्तराखण्ड अथवा खजुराहो आदि स्थानों से प्रकाश में आयी हैं, उनमें विष्णु के सामान्य मुख के अतिरिक्त सिंह-मुख और वाराह-मुख निर्मित किया गया है, इसके साथ ही कपिल-मुख को भी निर्मित किये जाने का विधान है जो पीछे होने के कारण प्रायः नहीं दिखाया जाता है। इसके अतिरिक्त सर्वतोभद्र प्रतिमाओं में कपिल-मुख भी देखा जा सकता है।

पलेठी से प्राप्त प्रस्तुत प्रतिमा में विष्णु का एक दाहिना मुख गज मुख जैसा निर्मित किया गया है, जो कि अपने आप में महत्वपूर्ण है। जब सामान्य वैकुण्ठ प्रतिमाओं में सिंह और वाराह का अंकन होता है, तो यह बिन्दु विचारणीय है कि किन परिस्थितियों में सिंह मुख के स्थान पर गज मुख का अंकन किया गया है।

उपर्युक्त तथ्यों को विचारने के क्रम में हम वैदिक ग्रन्थों में उल्लिखित उद्धरणों पर विचार करते हैं। वैदिक परम्परा में वैकुण्ठ इन्द्र से सम्बद्ध एक देव हैं। ऋग्वेद[3] में 47 से 50 तक कि ऋचाओं में इन्द्र-वैकुण्ठ को एक समन्वित नाम माना गया है। बृहद्वेत्त में वैकुण्ठ के उद्भव के सम्बन्ध में एक वर्णन मिलता है जिसमें कहा गया है कि विकुण्ठा नाम की एक आसुरी पुत्री प्रजापति की थी, जिसने इन्द्र को अपने पुत्र के रूप में प्राप्त करने के लिये तय किया जिसके परिणाम स्वरूप इन्द्र ने स्वयं विकुण्ठा के गर्भ से जन्म लिया और असुरों का नाश किया। विकुण्ठा के गर्भ से जन्म लेने के कारण ही इन्द्र वैकुण्ठ कहलाये। उपनिषदों (बृहदारण्यक) में वैकुण्ठ इन्द्र का ही एक उपनाम बताया गया है। बृहदारण्यक उपनिषद[4] में निम्न प्रकार से वर्णन है।

इन्द्रो वैकुण्ठेऽपराजिता सेनेतिवा अहमेतंमुपासइति।
स य एतमेस्ते विष्णु र्हो पराजिष्णुर्भवत्यन्यतस्तय जायी।।

वैदिक परम्परा में वैकुण्ठ इन्द्र से सम्बद्ध एक देव हैं, परन्तु परवर्ती साहित्य में वैकुण्ठ इन्द्र का ही एक नाम बताया गया है।[5] दुर्गाचार्य[6] के अनुसार विकुण्ठा नाम की आसुरी से इन्द्र वैकुण्ठ के रूप में जन्मे। विष्णु और

इन्द्र का सम्बन्ध वेदों में इसलिये है कि दोनों ने एक समान उद्देश्य व कार्य के लिये सम्मिलित रूप से प्रयास किया था[7]। यह महत्वपूर्ण कार्य था वृत्तासुर का वध। यद्यपि कि वैदिक काल में इन्द्र एक प्रमुख देवता थे, अतः वृत्तासुर का वध का कार्य उन्होंने स्वयं किया, इस कार्य में विष्णु न उनके सहायक व मित्र के रूप में सहयोग किया। ऋग्वेद[8] में इन्द्र और विष्णु को भ्राता के रूप में उल्लेख किया गया है तथा कहा गया है।

सनिकेभिः प्रसहानो अस्य भ्रातुन ऋते सप्तथस्य मायाः।

ऋग्वेद[9] में ही विष्णु ने तीन पगों में सम्पूर्ण ब्रह्माण्ड को नाप लेने का उल्लेख है। इस सम्पूर्ण ब्रह्माण्ड को तीन पगों में नापने की अपरिमित शक्ति भी उन्हें इन्द्र से ही प्राप्त हुई थी। ऋग्वेद[10] के अन्य उदाहरण में इन्द्र के विष्णु के पार्श्व में खड़े होने का विवरण भी मिलता है, जिसमें कहा गया है।

आ विष्णोः सचाभुवः (इन्द्र जो विष्णु के पार्श्व में खड़े होते हैं।)

वेदों में उल्लिखित उपर्युक्त उद्धरणों से यह तो निर्विवाद रूप से सत्य है कि वैदिक विष्णु का सम्बन्ध आन्योनासिक रूप से इन्द्र से रहा है और फिर वे विष्णु के एक गौण अवतार माने गये हैं। उपर्उल्लिखित उद्धरण में जहाँ विष्णु के पार्श्व में इन्द्र के खड़े होने का उल्लेख किया गया है। इसी तथ्य को प्रस्तुत मूर्ति के निर्माण के सन्दर्भ में लिया जा सकता है (यद्यपि मूर्ति विज्ञान में इन्द्र वैकुण्ठ की प्रतिमा के निर्माण का विधान नहीं प्राप्त होता है) वैदिक उद्धरणों के आधार पर जब विष्णु के भ्राता के रूप में इन्द्र का वर्णन किया गया है तथा उनके बगल में इन्द्र के खड़े होने का विवरण प्राप्त होता है, तो उसी आधार को मन में रखते हुए विष्णु व इन्द्र की मूर्तियों का साथ-साथ निर्माण करने की भावना भी परवर्ती शिल्प ज्ञानियों के मन में उठी होगी। अतः इसी तथ्य पर विचार करते हुए कालान्तर में जब विष्णु इन्द्र से अधिक लोकप्रिय देवता हुये तो उसी वैदिक परम्परा का अनुसरण करते हुए विष्णु को मुख्य देवता के रूप में तथा इन्द्र को उनके परम्परागत सुपरिचित वाहन गज के प्रतीक रूप में अंकित करने की लालसा ने जन्म लिया होगा। अतः इस प्रकार की मूर्ति का निर्माण उसी लालसा व उत्कंठा में प्रतिफल के रूप में देखा जा सकता है। यहाँ पर इन्द्र को प्रतीकात्मक रूप में उनके वाहन गज के रूप में अंकित करने का प्रयास किया गया है। इस मूर्ति के निर्माण में वैकुण्ठ के मुख वाले भाग में वैदिक परम्परा का अनुसरण किया गया है, जबकि आयुधों व लांछनों के प्रदर्शन में गुप्त काल के बाद की परम्पराओं को अपनाया गया है। जैसे प्रतिमा की हथेली पर पद्म का अंकन प्रायः गुप्तोत्तर काल तथा पूर्व मध्यकालीन प्रतिमाओं में देखने को मिलता है। यद्यपि विष्णु के पैरों में आभूषण या नूपुर के अंकन की परम्परा गुप्तकाल तक नहीं दिखाई देती है।[11] प्रस्तुत मूर्ति के पैरों में कोई आभूषण नहीं प्रदर्शित हैं। हथेली पर पद्म का अंकन इस प्रतिमा के पूर्व मध्य काल में निर्मित किये जाने की सूचना देता है।

इस सन्दर्भ में यह उल्लेखनीय है कि वैदिक कथाओं में इन्द्र व विष्णु के साथ-साथ होने की जो बात कही गयी है वह तो अति प्राचीन है, परन्तु प्रस्तुत प्रतिमा अत्यन्त बाद में निर्मित की गयी है इसलिए प्रस्तुत प्रतिमा से संबंधित कथा तो मिलती है परन्तु इसका मात्र संकेत ही प्रस्तुत करती है। अभी इस प्रकार की प्रतिमा के शिल्प शास्त्रीय अध्ययन की आवश्यकता है। प्रस्तुत प्रतिमा के अध्ययन को विद्वत समाज के सम्मुख इस विश्वास के साथ प्रस्तुत किया जा रहा है कि इसके शिल्प शास्त्रीय विधान की खोज हो सकेगी।

आभार : प्रस्तुत लेख के सन्दर्भ में आवश्यक विचार-विमर्श और सन्दर्भ उपलब्ध कराने के लिए हम श्री गिरीश चन्द्र सिंह के हृदय से आभारी हैं।

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श्री बुद्धि प्रकाश बड़ौनी,
क्षेत्रीय पुरातत्व इकाई, गढ़वाल, पौड़ी गढ़वाल।

जाजमऊ उत्खनन से प्राप्त एक मौर्ययुगीन अभिलिखित मृण्मण्डल

गिरीश चन्द्र सिंह

पुराविदों को अभी तक के उत्खननों से मौर्ययुगीन **मृण्मण्डलों** (टेराकोटा डिस्क्स) के दृष्टान्त तो बहुतायत में मिले हैं किन्तु अभिलिखित मृण्मण्डलों की संख्या अत्यल्प ही रही है। इस दृष्टि से जाजमऊ का प्रारंभिक ब्राह्मी लिपि में उत्कीर्ण यह मृण्मण्डल उल्लेखनीय है जिसकी विस्तृत चर्चा हम आगे करेंगे। जाजमऊ उत्खनन स्थल, उत्तर प्रदेश में कानपुर नगर से लगभग 8 कि०मी० पूर्व, गंगा नदी के दक्षिणी तट पर अवस्थित है। विवेचनाधीन मृण्मण्डल इसी उत्खनन[1] के प्रथम काल (मौर्य काल) के स्तर संख्या 25 से प्राप्त हुआ है[2]।

II

आकार-प्राकार में यह मृण्मण्डल वृत्ताकार है। इसीलिए हमने इसके लिए मण्डल शब्द व्यवहृत किया है क्योंकि **मण्डल** शब्द वृत्त या चक्र के अर्थ में इसके पूर्व से ही व्यवहृत होता आया है[3]। 6.9 से०मी० व्यास वाले इस मृण्मण्डल की मोटाई 1.5 से०मी० है। दुर्भाग्य से इसका ऊपरी अर्द्धांश भग्न हो चुका है। इसके अग्रभाग में छोटे-छोटे बिन्दुओं से अशोककालीन प्रारंभिक **ब्राह्मी** लिपि में– **उ प ति शे व** (उपतिशेव) शब्द उत्कीर्ण है। (चित्र सं० 1)। इस लेख के ऊपर वामभाग में **मयूर** का रूपांकन और दक्षिणी भाग में **वेदी**[4] (हालोक्रास) का अंकन है। मृण्मण्डल के परिकर भाग में छोटे-छोटे बिन्दुओं से एक वृत्ताकार आकृति बनाकर उसके नीचे **हस्तिनख** निर्मित किये गये हैं। मृण्मण्डल के पृष्ठभाग में छोटे-छोटे बिन्दुओं द्वारा पुनः वेदी का अंकन किया गया है। शेष भाग अस्पष्ट है। अग्रभाग की भाँति पृष्ठभाग में भी **हस्तिनख** का अंकन यथावत् है।

III

यहाँ प्रस्तुत मृण्मण्डल में लोक कलाकार ने **उ प ति शे व** अर्थात् उपतिशेव किस अभिप्राय से उत्कीर्ण किया है, यह विचारणीय एवं अध्ययन योग्य है। पालि व्याकरण के **सरासरेलाप** सूत्र के अनुसार उपतिशेव का सन्धि-विग्रह उपतिश्शृ+एव (संस्कृत इव) हुआ। अब उपतिश्शृ+एव अर्थात् उपतिश्शा की भाँति से लोक कलाकार का क्या आशय है? **यह भी** ध्यान देने योग्य है। पालि ग्रन्थों में **उपतिस्स**[3] नाम मिलता है। उपतिस्स **सारिपुत्र** का व्यक्तिगत नाम था[6], जो भगवान बुद्ध के प्रधान शिष्य थे। ये **उपतिस्सगाम**[8] के निवासी थे, जो ब्राह्मणों का एक गाँव था। यह गाँव राजगृह के निकट स्थित था[9]। इनको धर्म सेनापति[10], भी कहा गया है। इनके धर्मोपदेशों की सराहना भगवान बुद्ध ने स्वयं कई स्थलों पर की है।[11] **बौद्ध** साहित्य में सारिपुत्र के **दशोत्तर** धर्म[12], **सम्पसादनिय**[13] उपदेश, **सङ्गीति-पर्याय**[14] (एकता का ढंग) उपदेश का महत्वपूर्ण उल्लेख मिलता है। स्वयं सम्राट अशोक ने अपने कलकत्ता के द्वितीय वैराट लघु शिलालेख में **विनयसमुकस, अलियवसाणि, अनागतभयानि, मुनिगाथा, मौनेयसूते** आदि धर्मग्रंथों के साथ **उपतिसपसिने** नामक धर्मग्रंथ का उल्लेख किया है।[15] और भिक्षु-भिक्षुणियों से उसके पालन की भी अपेक्षा की है। इन ग्रन्थों के विषय में कि ये धर्मग्रंथ कौन हैं? विद्वान एकमत नहीं हैं।[16] यहाँ इस प्रकरण पर अधिक चर्चा न करके यह अनुमान तो लगाया ही जा सकता है कि उपतिस्स जो धर्माचार्य हैं, धर्म सेनापति हैं, जिसका उपतिस्ससुत्त, और जिसकी लोकप्रियता में श्रावस्ती में चैत्य निर्माण कराये जाने का उल्लेख है,[17] उसका उपतिसपसिने नामक धर्मग्रंथ न होना अस्वाभाविक प्रतीत नहीं होता।

उक्त विवरणों के अवलोकन एवं स्वयं भगवान बुद्ध द्वारा उपतिस्स का साधुवाद किया जाना[18] यह स्पष्ट करता है कि वह कितना बड़ा उद्भट विद्वान और महान धर्मोपदेशक था। अस्तु उसके लिए लोक कलाकार द्वारा उपतिशेव अर्थात् उपतिस्स की भाँति आचरण करने का उल्लेख करना न्याय संगत लगता है।

पुराभिलेखीय शुद्धता की दृष्टि से उपतिशेव में **श** के स्थान पर **स** वर्ण होना चाहिए था किन्तु '**श**' और '**स**' वर्ण की भिन्नता का कारण अस्वाभाविक नही है। प्राकृत अभिलेखों में उष्म ध्वनियों के लिए प्रायः भ्रान्तिमूलक चिन्हों जैसे **स** के लिए **श** या **ष** का प्रयोग मिलता है।[19] डा० वर्मा के अनुसार ऐसा **श** जिसके बायें पैर में अतिरिक्त रेखा जुड़ी हो, कम देखने

को मिलता है[20]। विवेचनाधीन मृण्मण्डल के लेख में **श** के बायें पैर में अतिरिक्त जुड़ी रेखा दक्षिणी ओर के रेखा के लगभग समानान्तर, लम्बी तथा कोणिय है। इस प्रकार के **श** का निदर्शन हमें लगभग 250 **ई०पू० के अशोककालीन काल्सी**[21] तथा **सोहगौरा** (गोरखपुर) के उत्खनन[22] से प्राप्त मुहरों में मिलता है। **व** वर्ण के उत्कीर्णन में नीचे की गोलाई को दाहिनी ओर ज्यादा घुमाया गया है। स्तर विज्ञान की दृष्टि से भी इस मृण्मण्डल का काल निर्धारण 300-200 ई०पू० के मध्य किया जा सकता है[23]।

IV

विवेचनाधीन मृण्मण्डल में **हस्तिनख** का अंकन भी उल्लेखनीय है। इस प्रकार का अंकन हमें कुषाणकालीन बुद्ध मूर्तियों के प्रभामण्डल में दिखाई देता है। प्रारंभिक काल की बुद्ध मूर्तियों के प्रभामण्डल में तो हस्तिनख का अंकन ठीक विवेच्य मृण्मण्डल के हस्तिनख के अंकन के अनुरूप थोड़ी-थोड़ी दूरी पर हुआ है[24]। परवर्ती काल की मूर्तियों में यह अंकन एक-दूसरे से सम्बद्ध करके दिखाया गया है[25] उपर्युक्त से ऐसा विदित होता है कि मौर्य काल में मृण्मण्डल के परिकर में हस्तिनख बनाने की परम्परा विद्यमान थी। इस प्रकार हस्तिनख अंकन के विकास क्रम की दृष्टि से यह मृण्मण्डल महत्वपूर्ण प्रतीत होता है।

डा० जोशी ने **मण्डल** को सूर्य का प्रतीक बताया है[26]। वास्तव में मण्डल की उपासना मौर्य युग के पूर्व से ही प्रचलित थी[27] और मौर्य युग में भी इसके प्रति श्रद्धा थी। हमें आहत मुद्राओं पर मण्डल व मयूर का अंकन दिखायी देता है[28]। पाटलिपुत्र से प्राप्त मौर्ययुगीन एक मृण्मडल पर **सूर्य** के सारथी **अरुण** उन्हें चार अश्वों के रथ पर ले जाते हुए दिखाये गये हैं[29]। एलन महोदय ने शुंगकालीन एक मृण्मण्डल पर सूर्य के अंकन का उल्लेख किया है[30]। बौद्ध ग्रंथों में कदाचित् **आदित्यपथ** मृण्मण्डल के लिए ही प्रयुक्त हुआ है[31] मौर्य युग में सूर्योपासना के प्रति श्रद्धा का अनुमान इन तथ्यों से भी लगाया जा सकता है, जहाँ हम भगवान बुद्ध को **अदितिया पुत्तों**,[32] **आदिच्च बन्धु**[33] और उन्हें **मयूर** के रूप में जन्म लेकर प्रातः और सूर्यास्त की उपासना करते देखते हैं[34]। यही नहीं उन्हें सूर्य के गौतम गोत्र से सम्बद्ध किये जाने का उल्लेख भी हम पाते हैं[35]। कदाचित् ऐसा इसलिए भी किया गया होगा कि ब्राह्मणधर्मी, जो बौद्धोपासना के विरुद्ध रहे हों, उन्हें अधिक से अधिक संख्या में अपनी ओर आकर्षित कर सकें।

मौर्य युग में सगुणोपासना की अपेक्षा प्रतीतकात्मक पूजा अधिक प्रचलित थी। प्रस्तुत मृण्मण्डल में उपतिशेव लिखने का अभिप्राय उपतिस्स के **तप्तम् मुख** को अदिच्च के रूप में[36] दिखाने का प्रयास दिखाई देता है। मण्डल पर मयूर का अंकन भी अवलोकनीय है। बहुत से विद्वानों ने मयूर को सूर्य का प्रतीक बताया है[37]। उत्खनन के जिस स्तर से यह मृण्मण्डल प्राप्त हुआ है उसी स्तर से एक प्राचीनतम पूजा सरोवर भी प्राप्त हुआ है जो सूर्योपासना से सम्बन्धित है[38] कुछ विद्वानों ने मयूर को मौर्यवंशी राजचिन्ह बताया है।

विवेच्य मृण्मण्डल को तिथिक्रम की दृष्टि से 300-200 ई० पूर्व के मध्य रखा गया है। इस अवधि में उपतिस्स अर्थात् सारिपुत्र की लोकप्रियता का अनुमान हमें साँची के स्तूप सं० 3 से प्राप्त उनके अवशेषों व नामोल्लेख[39]; सम्राट अशोक द्वारा नालन्दा स्थित उनके चैत्य को भेंट [40] तथा श्रावस्ती स्थित जेतवन विहार की स्थापना में **सुदत्त** को सहयोग प्रदान करने[41] विषयक तथ्यों से होता है। इस क्रम में जाजमऊ का यह मृण्मण्डल सारिपुत्र के व्यक्तिगत नाम का संज्ञान कराने के साथ-साथ यह भी अवगत कराता है कि तत्कालीन समय में उसकी लोकप्रियता न केवल राजकीय स्तर तक सीमित थी अपितु लोक कला में कानपुर तक व्याप्त थी।

आभार

प्रस्तुत लेख के लेखन में आवश्यक विचार-विमर्श हेतु सर्वश्री आग्नेलाल, हेमराज व छायाचित्र उपलब्ध कराने हेतु विभागीय भाचित्रक श्री राम गोपाल मिश्र का हृदय से आभारी हूँ।

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श्री गिरीश चन्द्र सिंह
उ० प्र० राज्य पुरातत्व संगठन, लखनऊ

Ancient Stone Quarries of Chunar : An Appraisal

P.C. Pant
Vidula Jayaswal

It is well known that Chunar sandstone had been extensively used in the Gangetic plains for both sculpture and architecture since third century B.C. Chunar still remains an important centre for supplying stone slabs used in various building activities. When stone was introduced as a medium for carving sculptures during the reign of *Aśoka,* heralding a new era in Indian art, hills around Chunar, known for their high quality sandstone[1], were chosen for extracting raw material. It is still an enigma as to what prompted *Asoka* to select Chunar for quarrying stone, when sandstone is so commonly found throughout the Vindhyan formations. As the means of transport must have been very limited during the period, it is only logical to presume that big perennial rivers might have commonly served as potential trade routes. Thus, the closeness of the Ganga might have been one of the important considerations for *Aśoka* to decide in favour of Chunar for establishing stone quarries. The standstone from Chunar quarries continued to be extracted even in the subsequent periods for many centuries mainly for making sculptures, and was widely used at many centres of Uttar Pradesh and Bihar[2]. The best example of its extensive use in later periods is provided by the sculptures of the famous Sarnath School of the Gupta and early medieval periods[3].

Although the evidence for extensive use of Chunar sandstone in sculpture and architecture of ancient and medieval India was known since long, the actual location and nature of quarries remained an enigma so far. Besides, in the absence of any knowledge about the ways and means of transporting the heavy and unwieldy raw material from the quarries to different art centres, no convincing explanation could be offered about them. Our recent discovery of a series of ancient stone quarries in the vicinity of Chunar and associated evidence of huge cylindrical blocks of stone sheds significant light on these and similar other historical problems.

We came across the evidence of these quarries rather accidentally, when we were excavating a couple of meglithic structures in the vicinity of Baragaon, approximately four km south of the Chunar railway station. The quarries as also the megaliths are situated on the flat surface of a large plateau, characterised by a thick deposit of sandstone of the Vindhyan formation. The soil cover is generally rather thin. Although the quarries of various dimensions are scattered in a large area of this plateau, their main concentration appears to be towards the east of the village Baragaon. Most of the quarries are not very deep, hardly exceeding four metres in depth. It is interesting to note that the modern stone cutters do not extract any slabs from the ancient quarries, since, according to them, continuous exposure has rendered their stone so hard as to become unusable now.

Most of the ancient stone quarries exhibit features of their own and can be distinguished from the modern ones. In almost every case there are a few finished, semi-finished or unfinished cylindrical blocks of stones in

and/or around the ancient quarries. These pillar-like sandstone blocks generally measure between 1.65 and 2.25 m in length and from 0.70 to 1.30 m in diameter. The available evidence indicates that the method of working in the quarries was perhaps not much different from that of the present day. The ancient quarry-workers also most certainly used long sturdy metal chisels (presumably made of iron) for extracting stones, as indicated by the deep chisel-marks occurring on the edges of the quarries as well as unfinished blocks of stones (Pl. 1A, 1B). In the process of extraction, rectangular blocks of desired length and thickness with roughly square cross-section were first taken out from the quarries. They were then further chiselled either in the quarry or just outside it to give them cylindrical shape. The process of smoothening the surface was never carried out at the quarry site. An interesting feature of almost every quarry is the occurrence of a series of short incised lines, sometimes numbering more than a hundred, on neighbouring flat rock surface (Pl. 2). In our opinion, they may be interpreted as quarry records of the count of blocks produced. If this interpretation is accepted then it would also be logical to presume that they were well organized stone quarries. If the testimony of Kautilya's *Arthasastra* is to be believed, the Mauryan kings maintained a well organized state machinery to exercise state control over "agriculture, industry and trade"[4], through "a vast, numerous bureaucracy consisting of the superintendents and subordinate staff in some thirty departments"[5]. In view of the above, it may be suggested that these quarries were also perhaps managed by state officials, at least during the reign of *Aśoka*.

To which period do these quarries belong ? Can they all be assigned to one period, or do they represent quarry-activities of different periods ? These are some basic questions which cannot be easily answered on the basis of the available evidence. The only evidence which can lead us to fix the chronology of the quarries is in the form of five inscriptions occurring on different cylindrical blocks. We sent a set of photographs of these inscriptions to Prof. B.N. Mukherjee of the Calcutta University who assigns all of them to the end of the first century A.D. According to him, all the inscriptions have been written in *Kharoshthī* script, while traces of a few *Brahmi* letters are also visible in one case. Dr. T.P. Verma of the Banaras Hindu University also deciphered one of the *Kharoshthī* inscriptions, and his reading is as follows ***a ti va o sa ha*** (Pl. 3). On the other hand Mukherjee reads it as ***a ti vyā ya ṣa ha***. Moreoever, Verma is also convinced that the inscription has been written in *Asokan Kharoshthī*. Thus, there is difference of opinion between the two not only about the date of the inscription, but also regarding the reading of third and fourth letters of the inscription. In view of the above controversy, we also made a comparative study between the letters of the inscription and those of Buehler's chart 6, which indicates that letters first, second, fifth and sixth of the inscription are akin to those found in the *Kharoshthī* inscriptions of Aśoka . As far as the remaining two letters are concerned we are neither sure about their reading nor chronology. In view of these observations we are rather inclined to support Dr. T.P. Verma and would like to place the inscription in the Maurya period. We have not studied the remaining inscriptions ourselves and, therefore, would not discuss them in this paper.

If our conclusion about the date of the inscription is accepted, it would mean that the first stone quarries were started in the region in the Maurya period, presumably at the instance of the world famous emperor of the dynasty, *Aśoka*. However, the use of the *Kharoshthī* script in the inscription is not without significance. It is well known that this script was used only in those inscriptions of *Aśoka* which have been found in the north-western part of the sub-continent. In the rest of the regions, *Brāhmī* was used. The two inscriptions of *Asoka* found in the radius of about forty km from Chunar-one occurring on the shaft of the lion pillar at Sarnath[7], and the other on a rock near Ahraura, district Mirzapur[8], have been inscribed in the *Brāhmī* script only. Considering these factors, the obvious question one would like to raise is- how do we explain the occurrence of the short inscription in the *Kharoshthī* script on a cylindrical block of sandstone near the Chunar quarries ? Apparently, one of the logical interpretations would be that the person responsible for this inscription was not conversant with the local script *Brāhmī*. This would mean that he was a foreigner to the region, and might have migrated from a place where *Kharoshthī* was the prevalent script. Since the inscription occurs on a cylindrical stone-block, lying near the quarries, we are inclined to believe that this person was somehow associated with the quarries ; perhaps he acted as the incharge or some sort of technical expert.

As there are no archaeological evidence for the use of stone medium for sculpture and building activities prior to *Asoka*, it can be held with some amount of certainty that India had no earlier tradition either of stone-quarries

or stone-chiselling. On the other hand, there was a long tradition of working on stone for building purposes in the neighbouring western countries, particularly Iran[9]. Under the circumstances, it is only reasonable to surmise that Ashoka had not other alternative but to call experts from western countries for technical advice for quarrying stone as well as chisellig the blocks into cylinders. Our conclusion, thus, seems to provide valuable support to the oft repeated view that the *Asokan* court art was influenced by foreign art traditions.

The evidence gathered by us from the quarries and their vicinity reveals that except chiselling the blocks of stones into cylindrical forms no other work was carried out at this site. Thus, the quarries were meant to supply raw material in the form of huge cylinders, and it was left to the sculptors working at various places, to chisel them further for making various art specimens. The method of transporting the raw material to different art centres does not remain a mystery any more. It appears that the people entrusted with the work of supplying raw material had developed an ingenious method of transportation of these unwieldy blocks of stone. Since they were round, they could be just rolled down the hills to nearby *nullahs* and valleys (Pl. 4), and from there to the banks of the Ganga, where they must have been loaded on suitable rafts for further transportation. Thereafter, the work was simple, and the rafts carrying cylinders could be easily maneuvered both up and down-stream. About a dozen persons or so would have been sufficient for the entire operation. A good number of round blocks of stones has actually been traced in the neighbouring valleys (Pl. 5) as well as the banks of the Ganga around the Chunar township. As many as five stone blocks can still be seen lying partly submerged in the river water.

Although the stone quarries were started around Chunar in the Maurya period, in our opinion, they continued to be exploited for raw material even subsequently, at least upto the beginning of the medieval period. In fact, the demand for the Chunar sandstone seemed to have increased enormously during the Gupta and post-Gupta periods, particularly at the neighbouring art centre of Sarnath[10]. It appears that even after the establishment of Muslim rule in India the utility of the Chunar sandstone continued to be recognized by the contemporary builders. The best example of the use of Chunar sandstone for building activities in the medieval period is presented by some mosques of Jaunpur, e.g., the Fort Masjid, the Jami Masjid and the Lal Darwaza Masjid of the fourteenth and fifteenth centuries[11]. In all these mosques, round or square pillars with or without capitals have been fabricated out of Chunar sandstone. Thus, the available evidence suggests that Chunar quarries continued to supply raw material for a long time, at least upto the fifteenth century A.D., to different places of construction and art centres.

During the Maurya period, Chunar sandstone was needed for constructing pillars and surmounted capitals. Obviously, cylindrical blocks of two different sizes, the longer ones for shafts and the shorter and thicker ones for capitals, must have been produced in the quarries. It is interesting to note that some of the cylinders still lying around the quarries favourably measure in length and thickness with the size of the *Aśokan* lion capital of Sarnath. The one which bears the above mentioned *Kharoshthī* inscription is one such specimen as could have been converted into a capital of normal size. However, none of the sandstone blocks at the site measures as much as the length of the shafts of *Aśokan* pillars. But, their absence does not appear surprising mainly because of two reasons. First, it was certainly not easy to quarry a huge block of around ten metre in length, and the specific demand. Second, those blocks, which might have remained unutilized at the quarries for reasons not known, must have been cut into several pieces in subsequent periods, when the need was for shorter blocks of stones for chiselling sculpures. It is significant to note that some such cylindrical blocks are still lying near the quarries as have been either cut into two pieces subsequently (Pl. 6), or bear chisel marks, indicative of these attempts.

Since round blocks of sandstone could be easily transported by rolling them down the hills up to the river bank, the earlier tradition of supplying raw material in the form of cylinders seemed to have continued even during the subsequent periods, although they were no more needed for erecting pillars. It appears that after transporting the blocks upto the place of work, where they were to be chiselled into various images, they were cut into two, lengthwise. Now the two pieces, having one face flat and the other curved, could be easily converted into sculptures, the flat face serving as back slab and the figure being carved on the curved surface. Thus, the round form of the blocks not only helped transportation, but also facilitated the process of making such images as projected from the back slabs. It is worthwhile to mention here that a large majority of the sculptures found at Sarnath falls under this very category.

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Prof. P.C. Pant,
Dr. Vidula Jawaswal
Department of Ancient Indian History, Culture & Arch.,
B.H.U., Varanasi. U.P.

Some Recently Noticed Kharoshṭī Epigraphs in U.P.

B.N. Mukherjee

Prof. P.C. Pant and Dr. Vidula Jayaswal of the Department of Ancient Indian History, Culture and Archaeology of the Banaras Hindu University discovered in early 1990 a series of stone quarries in the hill situated near the village of Baragaon and to the south of the Chunar railway station in the district of Mirjapur, U.P. The discovery was made known to me by Prof. Amita Ray of the Department of Archaeology of the Calcutta University. Recently I received from the discoverers a detailed note on the quarries. (Quotations from this note appear in the second and fifth paragraphs).

Prof. Pant and Dr. Jayaswal have noticed a large number of "massive round pillar-like blocks of stone lying in and around these quarries and their surroundings. That these quarries as well as the circular stones are old is simply attested not only by the present day stone cutters of the area, but also by the thick patination of the stone surface and a few inscriptions on the blocks. These quarries are no more exploited today since long exposure has rendered them unable". A series of incised short lines are noticeable on a flat rock in the vicinity of each quarry. In the opinion of the discoverers these may have been records of the count of blocks produced at the quarries.

Chunar sandstone is known to have been used for producing the pillars bearing the edicts of *Aśoka*. The same material was used at the place of the Mauryas at Pataliputra. Numerous sculptures found at Kaushambi (Kosam), Sarnath, Bodhgaya, etc. are made of Chunar stone. Obviously the sculptors at these sites depended in varying degrees from the Maurya period to the early mediaeval age on the supply of stone from the quarries in the Chunar area. Chunar quarries are known to have been exploited in mediaeval and modern times for getting building materials. Work is going on in several quarries even today. So chunar is an important source of supply of materials for activities in the field of Indian art and architecture.

The cylindrical blocks of stone (measuring 1.65 to 2.25 m in length and 0.70 to 1.30 m. in diameter), found at the sites discovered by Pant and Jayaswal, are noticeable in various stages of manufacture (Pl. 1). In their opinion the finished products (i.e. the cylindrical blocks) were used to be rolled down the side of the hill to the nearby valleys and thence to the bank of the Ganges, where these could have been loaded on rafts for further transportation. It is interesting to note that a good number of the blocks have been found in the valleys and some even on the bank of the Ganges near the town of Chunar.

As noted above, a few of the blocks bear inscriptions. One of them (No. 1 of our paper) has been deciphered by Dr. T.P. Verma of the Banaras Hindu University. He believes, as it appears from the report of the discoverers, that the epigraph is written in the *Kharoshṭī* script of the Maurya age. This hypothesis is the basis of the

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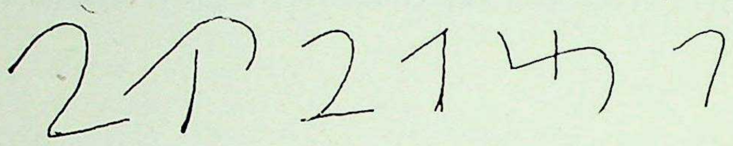

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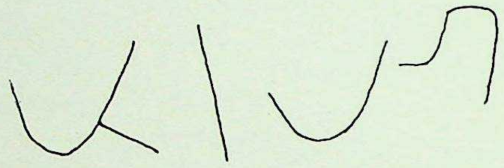

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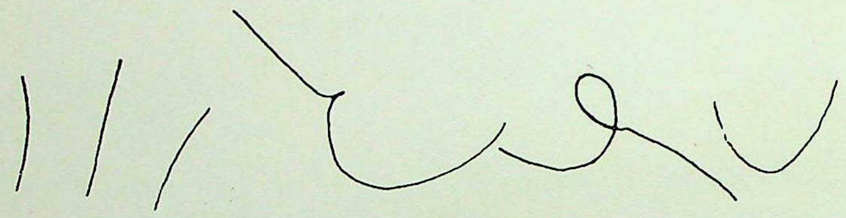

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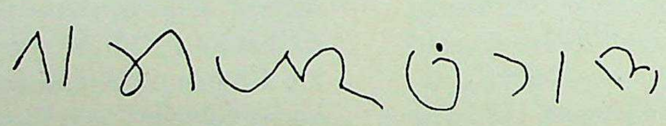

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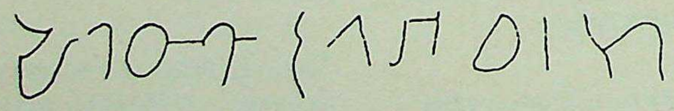

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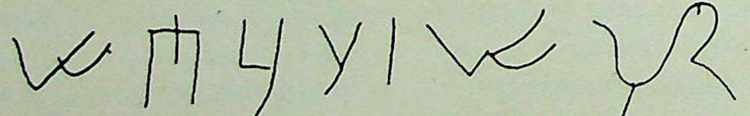

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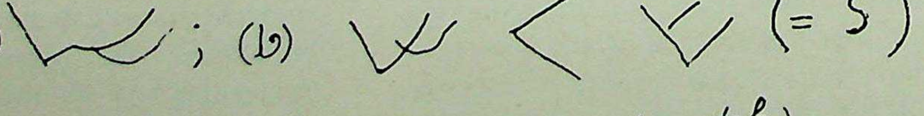
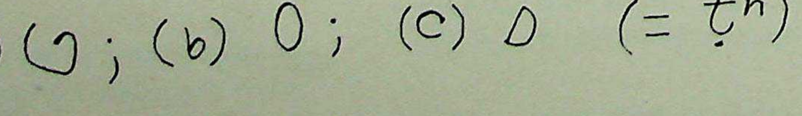


No. 8- (a)


EYE-COPIES OF THE INSCRIPTIONS

suggestion made by the discoverers that the quarries noticed by them "were started in the Maurya period".

The objective of our paper is to examine this suggestion and to decipher the inscription as they appear on the photographs made available to me by Dr. Vidula Jayaswal and Prof. Amita Ray. I am grateful to the discoverers for permitting me to utilise the epigraphic materials.

II

Inscription No. 1 (Pl. 2 and No. 1 of the eye-copies) :— This inscription is engraved on one of the circular ends of a pillar-like block of stone. It is in *Kharoshṭī* characters. The first two letters can be easily read as ***a*** and ***ta*** with the stroke for medial ***i***. The third letter can be taken as a developed form of ***va***, which can be seen in the *Kharoshṭī* and Khāroshṭī-Brāhmī inscriptions recently noticed in lower West Bengal[1]. The fourth letter is surely ***ha*** with a small stroke for medial **o** (as indicated by the extension of the base line of ***ha*** on the left). The inscription can now be read as *Ativaho shaha* (= *Ativaha-sahah*). It may be considered as indicating the pillar (*stambha*) bearing it as "capable of excessive carrying". Apparently the pillar-like block was certified to be capable of remaining in tact even after rough handling during its transport to a far away destination.

The date of the inscription is suggested by the form of the letter ***va***. None of the Kharoshṭī or Kharoshṭī-Brāhmī inscriptions from lower West Bengal, which display the relevant form of ***va***, can be dated before the second half of the 1st century A.D.[2] Hence the inscription should better be dated to the Kushāṇa age than to the Maurya period (as done by Dr Verma).

Inscription No. 2 (Pl. 3 and No. 2 of the eye-copies) :— This inscription on a pillar consists of four Kharoshṭī letters. It can be read as *(Śa)madamo*. It probably refers to the name of a person connected with the job of fashioning the relevant stone. Interestingly enough, the name *(Śa)madamo (Śramadāmah)* literally means "the son of labour"

Inscription No. 3 (Pl. 4 and No. 3 of the eye-copies) :— This Kharoshṭī inscription, written cursively, consists of four characters. Of these the first is definitely ***ma***. The second is ***ga*** engraved in a slanting manner (turning the base of the letter anti-clockwise to about 45°): The third letter is ***ma*** with the sign for medial **o**. The next three characters have the forms of the letter ***da*** as noticeable in the Kharoshṭī inscriptions from about the second half of the 1st century A.D. In the relevant forms the letter concerned appears as a straight vertical or slightly slanting line[3].

The inscription can now be read as *Magamoda dada* (= [*Etam stambham*] *mārgamodaṁ dada*) and translated as "give road-;leasure [to this pillar]". Obviously the finished pillar-like block was ordered to be transferred to the road connecting the hill with the river bank for this transportation on the Ganges. The order was passed with a sense of humour indicating as if the pillar would enjoy its transportation by road.

Inscription No. 4 (Pl. 5 and No. 4 of the eye-copies) :— A close examination of the first two characters (which at the first sight may appear as forming together a circle) reveals that these are *Kharoshṭī* numerals 20 and 1 engraved in a slanting manner with the base of each turning about 40° to the right. The stroke denoting the numeral "1" is put very close to the first or upper semicircle of the figure for "20" in such a manner that they together may appear to a casual observer as an ill-drawn circle. The lower semicircle of the figure for "20" is only faintly traceable on the photogrph supplied to me. But on the whole, a gap is noticeable between the slanting figures for "20" and "1". The next two figures can be deciphered as ***da*** and ***va***, the former having the form of a straight vertical line (as noted above). The next letter can be meaningfully deciphered as a variety of the letter called ***ṯeṯ*** (pronounced as ***ṭ*** or ***ṭ(h)*** in Aramaic, one of the parent scripts of Kharoshṭī (No. 7 of the eye-copies; palaeographic chart in B.N. Mukherjee, 1984)[4]. Aramaic ***ṯeṯ*** and ***shin*** (used in inscription No. 6) continued in the early centuries A.D. in certain scripts (including the Parthian) and so could well have been incorporated in Kharoshṭī of that period. (The use of ***shin*** is attested also by the Kharoshṭī and Kharoshṭī-Brāhmī inscriptions from lower West Bengal). The fourth letter of our inscription is a Kharoshṭī ***sa*** sritten slantingly, moving the base to about 25° to the right. The following letter is certainly ***ma***. It is followed by ***ya*** with the sign for medial ***i*** written cursively. The last two letters are ***da*** and ***ya***.

We can now read the Kharoshṭī inscription as 20[+] 1 ***da vaṭ(h)a samayi daya*** (= *21 da vāṭa-śramāya deyaḥ*). It may be translated as "21 da to be given for road-labour".

Here the letter ***da*** probably stands for *dramma (dramma darama* or *damma)*. This type of abbreviation is noticeable in Kharoshṭī inscriptions[5]. The name *dramma (drachma)* usually denoted a silver coin. But with the debasement of silver currency in the north-west in the first half of the 1st century A.D., it would have denoted coins of baser metal. In the Kushāṇa age the name may have been applied to the copper coins of the reformed currency system. Such copper coins were based on the weight system of Attic drachm. V'ima's copper coins correspond to the weights of tetradrachm, didrachm and drachm.[6] Thus a class of Kushāṇa copper coins could have been called *dramma.* In that case the inscription in question seems to state that 21 drammas were to be given to the labourers engaged for carrying (or rather rolling) the pillar on the road for transporting it to the river bank.

Inscription No. 5 (Pl. 6 and No. 5 of the eye-copies) :— The first letter of this Kharoshṭī inscription is ***ba*** with the sign for medial ***o***. The next figure represents the most developed form of ***da,*** indicated by a nearly vertical line. The third character is the nearly circular variety of the Aramaic letter ***ṭe***, which, as noted above, was probably incorporated in Kharoshṭī of the early centuries A.D.[7] The next three letters are ***śa*** (?), ***ya*** and ***da.*** These are followed by ***e, ṭe*** with the sign for medial ***e, a*** and ***sa*** with the sign for subscript ***y.*** The inscription can now be read as *Bodaṭ(h)ā śayada Ethe'asya.* Keeping in mind that in Gandhārī Prakrit (in which the *Kharoshṭī* epigraphs of the north-west are written) there is a marked tendency for aspiration, and that there is also evidence of the occasional use of ***ba*** for ***va*** (c.f. *sambatsara* for *samvatsara* in the Takht-i-Bahi epigraph of the year 1003), we may meaningfully Sanskritise the inscription in question as *Vyastata-śayata-Eṭ(h)akasya.* In that case, the epigraph can be translated as "Of Eṭ(h)aka, who disorderly sleeps too much".

It seems that the pillar on which the inscription appears was probably to be made ready for transportation by Eṭ(h)aka. According to the writer of the inscription, which records an instruction from a superior authority, the labourer concerned had the ill reputation of not doing his duty properly as he often fell asleep "in a disordered manner" probably during the working hours when such an act was not permissible.

Inscription No. 6 (No. 6 of the eye-copies) :— This inscription is read on the basis of an eye-copy made from the projection of a slide of it lent to Prof. A. Ray by Prof. Pant. It can be doubtfully read as *Haksha Sadajada śiśa (Hakshaḥ Śadajada-Śishyah)* and translated as 'Haksha, the pupil of Śadajada". The character read here as ś seems to a variety of one of regular forms of the letter *shin.* Its appearance might have resulted from writing it cursively (No. 8 of the eye-copies).

The inscription obviously refers to a master stone-mason and his pupil. The name *Śadajada* betrays Iranian influence. The disciple was apparently entrusted with the task of making the pillar ready for transportation.

The pillar-like block in question seems to bear traces of some *Brāhmī* characters. These may have belonged to a Brāhmī inscription imparting some instructions in a locally intelligible script.

The projection of another slide lent to Prof. A. Ray by Prof. Pant revealed traces of a few lines apparently containing some Kharoshtī letters. But these appeared to us to be too indistinct to admit of faithful transcriptions. Their decipherment and also the final reading of inscription No. 6 will have to be postponed till the availability of good photographs.

Neither the inscription No. 1, nor any other of the above records can be palaeographically attributed to the Maurya age. They appear to belong to a single period, which may be placed in the last 1st or in the 2nd century A.D.

III

We may now turn our attention to the historical importance of the records. Their language betrays some characteristics (like the tendency for aspiration, use of three sibilants, though sometimes replacing one by the other, etc.) of Gandhāri Prakrit, employed for writing Kharoshtī inscriptions in the north-western section of the Indian subcontinent. Obviously the author or authors of the records hailed from the north-west. The period of his or their activities at Chunar may be placed, as indicated above, in the late 1st or in the 2nd century A.D.

Apparently the relevant quarries were worked in *inter-alia* the Kushāna age. These were owned or held on lease by an enterpriser or some enterprisers from the north-west. Such a person or such persons or his or their representatives left instructions to the supervisors of

labourers about the duties and wages of the latters. The supervisors apparently knew *Kharoshṭī*, which the local labourers were not expected to know. They were probably verbally informed of their duties by the supervisors who followed the recorded instructions. The labourers doing a job demanding some expertise (like fashioning a block of stone into a fine pillar) might have been trained by master stone cutters. One of them, whose name betrays Iranian influence (inscription No. 6), might have come from the direction of the north-west.

The inscriptions record the names of labourers and apparently indicate their duties regarding the production of pillar-like blocks (Nos. 4, 5 and 6), certify the capability of a pillar to withstand the hazard of long transportation (No. 1), give an order for transportation by road of a pillar (from the quarrey to the river bank) (No. 3) and fix the wage for the labour of such transportation as twentyone drammas (No. 4). In the Kushāṇa age the term *dramma* could denote a copper coin of low denomination. One of the epigraphs mentions the name of a master stone-cutter (?) (No. 6) and another uses chiding words for a particular labourer.

The inscriptions allude to the presence of Kharoshṭī-using enterprises (from the north-west) in the territory of eastern U.P. in the Kushāṇa age. For commercial purposes such enterprisers migrated even to further east as proved by the Kharoshṭī and Kharoshṭī-Brāhmī inscriptions from West Bengal.

The inscriptions concerned furnish useful data about the working of labourers at stone quarries. Information of this nature is not available from the Kharoshṭī epigraphs in the north-west. Herein lies the importance of the records concerned.

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Prof. B.N. Mukherjee

Carmichael Professor of Ancient Indian History & Culture, University of Calcutta.

A Macro-Level Study of Painted Grey Ware Culture *

Vibha Tripathi

The nomenclature Painted Grey Ware Culture (PGW, henceforth) stands for a Ceramic culture ecologically at home over a large expanse of land spreading from the Indo-Pak border in Rajasthan, through Punjab and Haryana to the central Ganga Yamuna Doab. Field work during the last decade have added fresh evidence and new dimensions to the PGW culture. Previous attribute of homogeneity associated with PGW has already been challenged by the present author[1] by bringing out the phenomenon of regional variation markedly noted in course of a close study of the culture. An attempt is being made in this paper to conduct a macro-level study of PGW culture to examine, in further detail, its local attributes and whether it had any chronological connotations.

A re-examination of the cultural traits and habitation pattern of PGW culture shows a lack of uniformity. On the present reckoning, PGW sites may be found to be concentrated in four major zones (see map).

I. The first Zone is formed by a group of sites located along the banks of the dried up rivers Sarasvati (Ghaggar) and Drisadvati (Chautang) in the Bikaner division of Rajasthan, & in Bahawalpur state of Pakistan along the dried up course of Ghaggar (known as Hakra in Pakistan)**.

II. The second Zone is located in more perennially watered regions of the same rivers along their upper courses, and basins of rivers Sutlej and Yamuna. This comprises the States of Haryana and Punjab.

III. The third Zone comprises sites located in the upper parts of Ganga-Yamuna Valleys, notably Meerut and Agra Divisions of U.P. This is contiguous to the Second zone above.

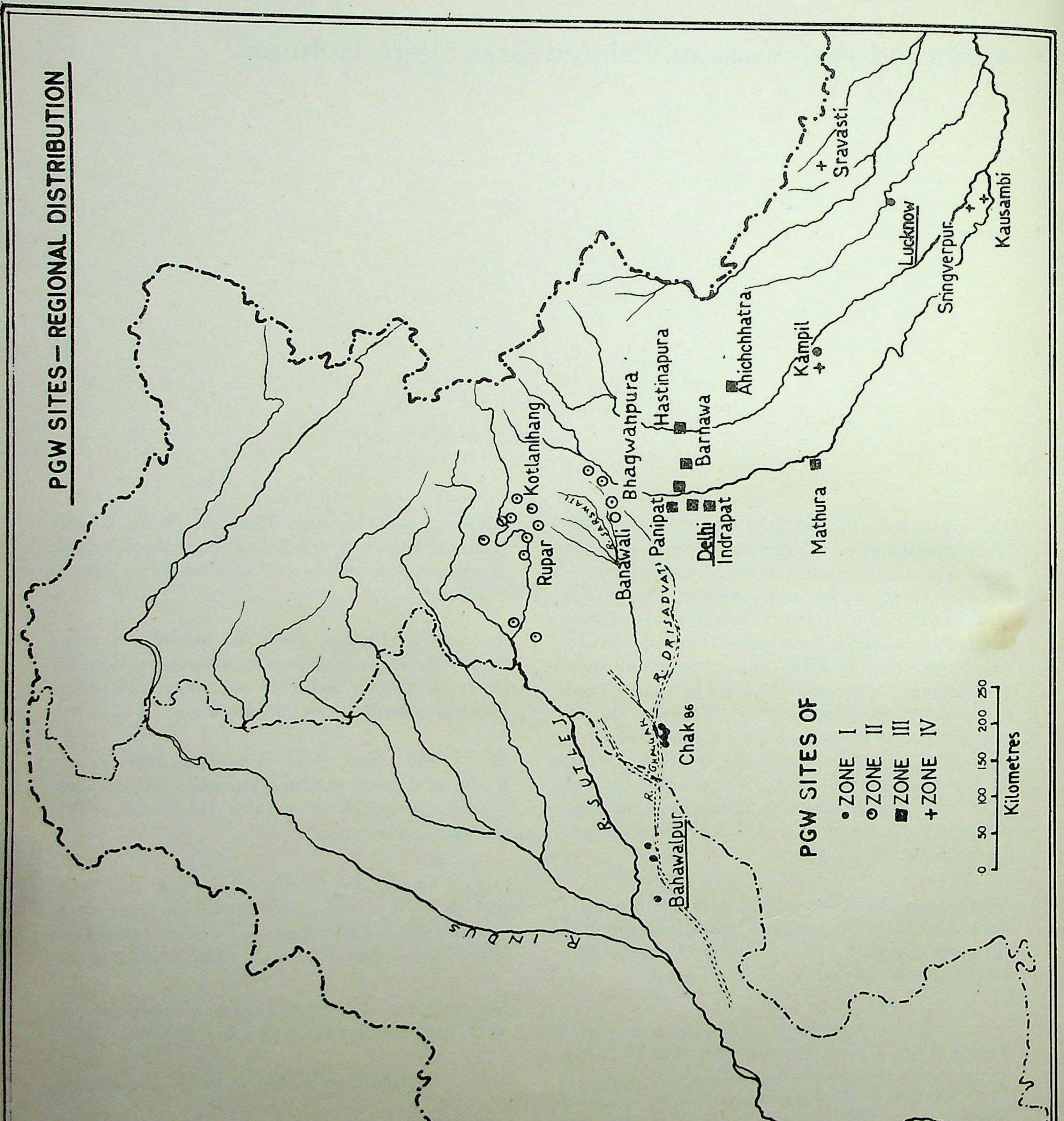
IV. Finally, the fourth zone which has in its fold the group of sites located in the lower region of the Ganga-Yamuna Doab coinciding with the present day Allahabad and part of Lucknow division of central U.P.

We shall proceed to discuss individual zones and their distinctive features associated with the PGW.

I. A. Ghosh explored the dried up river beds

* This article is based on a paper entitled "Stages of Painted Grey Ware culture" Presented at the Joint Session of Indian Archaeological Society & Indian Society, for Prehistoric and Quaternary studies, at Allahabad, 1980.

** Ten sites bearing PGW & the associated red ware have been reported by Mughal[2] in Cholistan area. No details except a brief mention of the sites are available.


PGW SITES— REGIONAL DISTRIBUTION
Sravasti
Kausambi
Lucknow
Sringverpur
Kampil
Ahichchhatra
Hastinapura
Barnawa
Bhagwanpura
Kotlanihang
Rupar
Banawali
Panipat
Delhi
Indrapat
Mathura
R. SARASWATI
R. DRISADVATI
R. GHAGGAR
Chak 86
R. SUTLEJ
Bahawalpur
R. INDUS
PGW SITES OF
• ZONE I
⊙ ZONE II
■ ZONE III
+ ZONE IV
0 50 100 150 200 250
Kilometres

of sites (approximately hundred) both with Harappan and grey ware affinities. He hinted at some late Harappan elements too, a phenomenon not so well recognized at that time*.

On the basis of the study of the natural soil, Ghosh[3] stated that the remains of the Harappan culture were on a natural sand-deposit. Ghosh had observed that the two clayey deposits caused by river action had intervened the Harappan and PGW cultures. It was only after this deposit that PGW habitation started at Chak 86. Further-more, Ghosh pointed out that in this region the Harappan and the Grey Ware people never came into contact. One may go a little further than Ghosh and say that the PGW people arrived in the region after a fairly long gap as indicated by the accumulation of the clayey deposits during the period intervening between the end of the Harappan settlement and the beginning of the PGW habitation.

A close examination of the cultural material, especially of the pottery reveals certain features exclusive to these sites.

A. PGW is very restricted in number. Though it is nowhere more than 10% of the total assemblage, but in Bikaner division the percentage seems to be far below that. Though no statistical account is possible yet this was a noticeable factor observed on examination of the excavated material brought forth by Ghosh.

B. There is a comparative preponderance of plain grey ware varying from fine to coarse textured vessels. The storage wares of medium to coarse fabric bear spiralled decorations all over the body of the pot. Such examples have been found at most of the site e.g. Chak 86, Chak 72 and Sardargarh (which was briefly excavated by Lal) [Pandey, personal communication] (Pl. 1).

C. Certain unusual or unstandard shapes occur here e.g. spouts or handles, some of them with decorations, attached to the rim and the lower end of neck or shoulder in red ware, and a few unusual shaped vases in grey ware, all seen at Sardargarh (Pl. 2). Ghosh notices the presence of "enormous amount of red pottery with shallow impressed designs and with a base basmeared with coarse grifts (Pl. 3). This type of impressed decorations showing concentric circles in groups, or lines forming checks covers large area of the surface of the vessels[5] (Pl. 4-5) This feature which is associated both with red and grey ware again seems exclusive to this region. In Chak 86 and 72 an impressed decoration on a grey ware sherd shows lines emanating from a circle which looks like a sun pattern seen on a Grey-Ware sherd. This type of the decoration has been noted on red ware associated with PGW at ten sites reported by Mughal in Bahawalpur State (former) in present day Cholistan.

D. Designs executed on PGW sherds generally lack the neatness in execution compared to those seen on the similar vessels in the Gangetic Doab. Finer examples do occur yet their number seems to be much smaller as compared to zones II and III. According to Ghosh "the vessels in grey ware are restricted in shape, being confined to dishes and bowls. The painted designs also present a limited variety."(Pl. 6).

E. Every where in this zone the PGW people started their settlement on soil unused by the earlier inhabitants.

F. No iron has so far been reported here from the PGW assemblage.

II. From Bikaner subdivision of Rajasthan the foci gradually shifted towards north-east in valleys of Ghaggar and northwards in Sutlej to modern Punjab and Haryana. Ancient Sravasti, however, retained the PGW folk's attention and the upper course of the river has yielded no less than 71 sites in modern Haryana alone. Drisadvati, which had not been so favoured earlier (Ghosh plotted a single site on its bank), also yielded 44 sites in its upper and more easterly course. Of especially interest in the settlement pattern is a discontinuity in space between the more westerly sites of Bikaner and the sites in Haryana. There is a cluster of PGW culture sites near Chak 86. Beyond that point for some distance we do not get PGW habitation. It is absent on the lower Drisadvati and in west of Sarasvati. A typical illustration of this phenomenon is provided by Banavali where PGW is absent. We start getting PGW sites sufficiently away from Banavali in the north-eastern direction.

The cultural material necessitates a further division of this zone, viz. II A comprises those sites where an overlap phase between late Harappans and the PGW culture has

* It is only lately after so many years that Sharma[4], has pointed to the presence of late Harappans or Baranas at Ropar

been detected. II B — In this very geographical region most of the sites, therefore, should form a separate category.

II-A The most striking feature of this region is the interlocking of the Late Harappan culture with the PGW. Following the excavations at Bhagwanpura, Joshi has found similar evidence of overlap from sites like Nagar, Katpalon and Dadheri. Sanghol[6] also is said to have yielded similar evidence. These sites had been reported earlier also for their Late Harappan and PGW cultures. The overlapping was confirmed in the subsequent digs. Joshi[7] has plotted 8 sites in Gurdaspur, 4 in Jullunder, 5 in Ludhiana, 5 in Patiala, 2 in Ropar and 2 in Sangrur all showing overlap of two cultures. The facts regarding these cultures are —

A. PGW culture at these sites is an intruder, settling over the small remains of Late Harappan habitation. Some Late Harappan shapes are said to have been fabricated in grey ware[8].

B. It is also stated that a design formed by thick bands occur in PGW in the earlier levels of overlap phase. Besides, a few new designs like the maltese cross and intersecting circles occur here.

C. The use of baked bricks in the structures has been attested to.

D. No iron has been reported from Bhagwanpura and other sites of this group. On the other hand in the Ganga-Yamuna valley the metal appears from the earliest phase of PGW culture.

E. Black-and-Red ware is conspicuous by its absence at these sites.

II-B A large number of sites have been explored by Suraj Bhan[9] in Haryana. Ropar, however, represents this group of sites. Their characteristic features are enumerated below.

A. Decorations on red ware and certain unusual shapes like the lota shaped vase, a channel (Pl. 3) found here seem to be continuation of the Bikaner traits.

B. Black-and-Red ware occurs here while it is missing from II A where only Black slipped ware is associated with Grey Ware.

C. No iron has been found at Ropar and other sites of Haryana so far.

III. PGW settlements in Yamuna-Ganga doab are placed in this zone. Geographically, the two zones II & III are extensions of each other. In this category we shall study the mature PGW cultural phase. Such sites are found in western U.P. and in the adjoining region of Punjab, Haryana and also Rajasthan (eastern most). The important features of this zone are —

A. The PGW culture reached its height at this stage. The pottery is mostly fine in PGW as the associated wares.

B. The designs on PGW tend towards standardization. There is a comparative profusion of strokes, multiple bands, dots, dashes etc.[10] Although beautiful patterns, floral as well as geometric, occur quite frequently, but they are generally interspersed by strokes etc. Larger areas of the surface of the vessels is covered by designs. This assumption is based on preliminary examination of pottery.

C. Bowls and dishes are perhaps the only shapes represented in this ware. This is true of Hastinapur as well as sites like Atranjikhera and others. In the Sutlej and Ghaggar basins in Haryana and Punjab i.e. Zone II Ropar and Bhagwanpura collections have revealed a sprinkling of shapes other than bowls and dishes.

D. While discussing the features of Zones I and II we had noticed the presence of stamped and incised decoration both on plain grey and red wares. This feature is absent in this region and except for occasional occurrence of punched circlets, the plain grey ware and red ware are devoid of any kind of incised or stamped decorations.

E. Most of the PGW yielding sites in this region are associated with Iron. The typical examples are Hastinapur, Atranjikhera, Allahpur, Alamgirpur, Noh etc.

IV. The fourth zone is the easternmost region of the PGW culture. Here the PGW specimens are scarce as at Sravasti, and Kausambi. Starting point of this zone may be the area around Kampil in Farukhabad

District where a small scale excavation[11] produced a number of typical Grey Ware specimens which were very much like the PGW in so far as the shapes and fabric are concerned. However, a very small number of specimens showed painted designs and that a limited area of the surface was painted. At Sravasti the occurrence of PGW is associated with full use of NBP ware specimens. Another interesting feature noticed at Sringverpur is that a few specimens of Grey ware showed painted designs wherein the painted surface showed the typical NBP finish.*

DISCUSSION

Chronology –

A movement of some kind is also discernible in the chronological chart of the PGW culture. The sites located in the Sarasvati-Drisadvati valley have not been subjected to C^{14} dating, no samples were collected from this region (Zone I) but the cultural material, on closer observation speaks of its comparative elementary nature. In Zone II-A there is an interlocking of PGW culture with Late Harappan culture. This region has been dated between 1300-1100 B.C.[12]. The Late Harappans survive in Haryana till the end of 2nd mill. B.C. or beginning of Ist mill. B.C. The PGW arrives towards the end of the Late Harappan culture and, therefore, may be dated to this period. Sites like Ropar and the more recently excavated sites of Haryana may be dated to early centuries of the Ist mill. B.C. In eastern Rajasthan, Noh and Jodhpur have been dated to c 900 BC by C^{14}. Further east in the Gangetic basin Atranjikhera has yielded consistent C^{14} dates centreing around 600 B.C. from the mid level. The culture there might have started approximately 200 years earlier. Thus the beginning of PGW culture at Atranjikhera should go back to c 800 BC.** Hastinapur, a key site of PGW culture & one of the earliest to be excavated has yield five C-14 dates from PGW level. The earliest date is 570 ± 125 B.C. and the youngest 335 ± 110 B.C. though these dates are contaminated by rootlets. The uncontaminated samples yield a date of 375 ± 100 & 390 ± 11c.B.C. These dates belong to late level of PGW culture. According to Lal's own estimate the culture at Hastinapur lasted for 300 years, therefore, PGW culture should have started in C̱ 700 B.C. at Hastinapur. Though there may not be agreement on the above dating of PGW culture but these dates decidedly point to a shifting of culture from west to east. It is clear from the above that the four zones showed distinguishable features. Zone I i.e. Sarasvati-Drisadvati valleys— the western sector of Bikaner division has fewer PGW sites. The "unpretenious" nature of PGW settlements as pointed out by Ghosh is reflected in the poor quality of culture and stands out in marked contrast to the finds in zone II i.e. Sarasvati-Sutlej sector of Punjab and Haryana. It is possible to surmise that the settlement in Zone I may represent the stage when the culture had not taken deep roots. If this assumption is correct, the settlement in Zone I may be regarded as the earliest. This was followed without much of a time gap by a movement to the Zone II. It is not difficult to guess the reason for this movement. It would seem that not long after the settlements grew, people must have realized the danger of dwindling water supply caused by the hydrological changes in the Sarasvati and its tributaries. The second stage, thus is represented by the settlements in Zone II i.e. Ghaggar-Satlej plains of Haryana and Punjab. Ecologically, this region was more favourably placed. This is reflected in proliferation of PGW sites in this region. Available indications show qualitative changes in the cultural material as also in the greater variety in shapes and designs in ceramics as well as in sizeable structural activity such as at Bhagwanpura. In the third stages, there was further expansion of settlements in the neighbouring zone III i.e. Upper Ganga-Yamuna valley. Two important changes have been noted-the introduction of iron and a trend towards standardization of shapes and designs in the PGW ware. The area of settlement during the PGW phase also shows an expansion as compared to the preceding phases as can be seen at Atranjikhera & several other sites.

In the fourth Zone the PGW tradition moves further eastward upto the end of Ganga-Yamuna Doab. There is a distinct evidence of comingling with the cultural elements emanating from eastern region as indicated by an overlap of PGW with NBP specimens which may be termed as the classic example of comingling of PGW and NBP ware traditions. Finally the PGW culture gradually merges with elements drawn from more easterly region to produce the culture represented at proto-urban centers of the early historical India during 6th-5th cent. B.C.

* Personal observation.

** The solitary date of 1025 + 1.10 from Atranjikhera is an outlier and may not be considered at all.

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Dr. Vibha Tripathi
Department of Ancient Indian History,
Culture & Arch., B.H.U., Varanasi.

Division of Society and their food in Madhya Pradesh from Chalcolithic Period to Mauryan Period

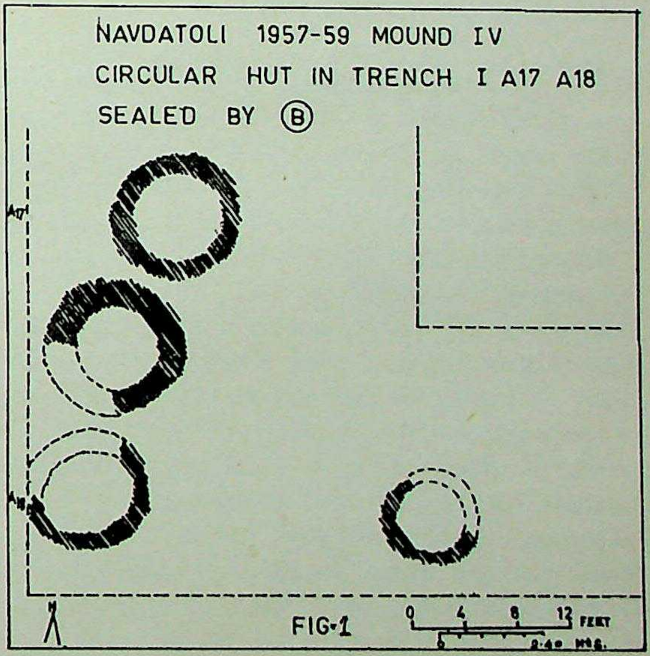
R.A. Sharma

Merely on the basis of Archaeological remains from various sites it is very difficult to say about the division of society during the chalcolithic and early historical cultures in India, particularly in Madhya Pradesh. It is, however, pertinent to refer to some observations regarding the social organizations of those times. It has been shown that rectangular houses (Pl. 1) are to be taken as a proof of fully settled life, round houses or huts suggest a temporary settled existence.[1]

Throughout ancient period, India has remained one cultural unit despite political and geographical diversities. Religions, castes and languages did not come in the way of its cultural unity. The evolution of social organisations primarily is an out come of the basic needs, their fulfilment, adjustment of human behaviour and cultural and religious understanding.

Social life as envisaged here is designed to covey an admittedly simplified picture of some of the basic patterns of human endeavour. As such it refers to the patterns of thought, emotions, values and ideas. Thus, culture in this sense not only filters human experiences but organisational behaviour[2].

The round huts found at Navdatoli (Fig. 1) and Inamgaon provided an indication to the settled life of different groups of persons or communities. The Jorwe people, also lived a settled life but their successors in the late



Jorwe culture could not afford it, save a few persons who lived in the rectangular houses.

There are some evidences to show that the early Jorwe society consisted of big families. A large house belonging to the mid-levels of early Jorwe contained three big pit sil es and nearby a Chulah on mud piatform. But with the increase in the number of the family members, several rooms were use to be added as and when required. They were all independent structures which would have been

wrongly identified as houses, but a few of these had a Chulah and a storage facility[3]. The house complex can, therefore, be said to have been occupied by a large family comprising father, mother, grand parents, and a group of children for whom separate rooms must have been required. This observation has been based on a study of artefacts recovered from the different rooms.

Our contextual or conjuctive approach has enabled us to identify the activity areas on the basis of which we could divide the late Jorwe round huts into various clusters, each consisting of two or more huts. An analysis of the artefacts shows that in these clusters there was usually one hut containing a Chulah and a storage facility whereas most of the other rooms, save one, could be associated with women's activity. It is, therefore, likely that the late Jorwe, was a polygamous society in which every time the person aquired a new wife, a new hut was built for her. This is precisely what the Kohalis of Vidarbha even practice today[4]. It may also be stated that in other parts of the world, the round huts are generally taken to indicate a polygamous society[5].

About the division of society during chalcolithic period the special mention may be made here that during the vedic period no division of society or caste system existed as is evidenced from the hymn of Rigveda where a poet says that my mother work for grinding the flour and my father as a vaidya. Thus, it seems that though division of society was based on the respective jobs or professions but heredity was not the basis to inherit a particular profession. During the early historical times some light upon the class system has been thrown by some contemporary classical writers. Megasthenese mentions seven castes in India viz., Philosophers, farmers, shepherds and hunters, artisans and the day-labourers, inspectors and spies, warriors and councillors. Here also the Megasthenese's emphasis is on the professions rather than the rigid caste system.

During the chalcolithic period the excavations provide evidences of many crafts, on the basis of which the divisions of society must have been constructed. During this period several potteries are found which indicate that potters and their community members prepared several types of potteries. Few of them were experts in their profession and prepared the pottery of good quality like P.G.W. and N.B.P. etc. This profeciency must have come by following the particular craft from generation to generation. Terracotta objects indicated that in the society this particular class was living and preparing all the objects according to the need of the people. A few specimens of terracotta objects are really the master pieces of art as evidenced by the excavated material. This class may be designated as "Artists or Kalakar".

Chalcolithic and early historical sites, including Navdatoli, Kayatha and Dangawada have yielded a few objects of copper. These copper objects include copper bangles from Kayatha, daggers from Navdatoli and also other objects such as axes, ear ornaments and antimony rods etc. On the basis of these remains a distinct group of copper-smiths may be defined during this period. In addition, different professions like stone work, ivory work, bone work, glass work, semi-precious stone work, iron work, house building wood craft or wood work, etc. were followed in the society according to the need of the time and the people. Thus, it becomes easy to reconstruct the different groups based on different crafts or professions such as bead maker (Malakar), Artist (Kalakar or Shilpkar), Potter (Kumbhakar), Mason (Karigar), Iron-smith (Luhar) and Carpenter (Badhai).

Besides these, the grains have also been found which indicate that agriculture was also followed as a profession during this period. Oil seeds were also found which indicate towards the workers in oil-seeds like Telikar during the chalcolithic and early historical times.

From Dangawada[6], Navdatoli[7] and Tripuri[8], the remains of Yajna-Kunda or fire pit (Pl. 2) have been found which might have been used for sacrifices during the chalcolithic and early historical periods. It seems that a class of worshippers or purohits existed in the society, who could perform these religious jobs.

From the excavated sites, several bones of wild and domesticated animals, arrow-heads and spear heads have been found indicating that a class of hunter and herdsmen existed during this period. Several spinddles have also been reported which speak about the weavers class.

On the basis of different professions, being followed during the period under study, the society may be divided into the following divisions :

(1) Worshipper of mother Goddess and performers of Yajna (Brahmins or Purohits).

(2) Hunter (Shikari)

(3) Herds-men (Charwaha)

(4) Weavers (Julaha or Tantukar)

(5) Farmers (Khetihar or Krishikar)

(6) Bead makers (Malakar)

(7) Artist (Kalakar or Shilpkar)

(8) Carpenter (Badhai)

(9) Copper-smith (Tambra-Dhatukar)

(10) Gold-smith (Swurnakara)

(11) Black-smith (Luhar or Lohkar)

(12) Potter (Kumbhakara)

(13) Mason (Karigara)

(14) Trader (Vanika)

(15) Oil seed workers (Tailikara).

In addition to these, there were also some other classes in the society who are still unidentified.

It is also presented that the chalcolithic cultures oftenly derived a diffusion of influences and people from Iran and other western Asiatic regions. It is held that chalcolithic cultures originated from Harappan culture. The end of Harappan culture in 2000 B.C. made the beginning of the chalcolithic cultures which spread towards different regions, including Madhya Pradesh. Some scholars even corroborate these cultures with the Aryans. The following tribes are identified to be pre-Aryan such as the Nagas, Savaras and Pulindas who, according to the Purana, are the original inhabitants[9]. It is also advocated that ancestores of some of the primitive or aboriginal tribes such as Bhils, gonds and beigas were the people of these cultures. The people of early iron age cultures denoted by black-and-red ware and the painted grey ware[10] seem to be the Aryans.

The food grains and bones of animals, often found burnt and unburnt, indicated about food habits of the people of that time. Food of these people was cooked on hearth or Chulah, found in the houses of chalcolithic and early historical periods.

From chalcolithic period, the rice and wheat have been found in the excavations lying in the form of carbonised seeds. Navdatoli is one of the best example in Madhya Pradesh which has yielded several cereals, legumes, oilseeds and fruits. These cereals have also been found from Dangawada excavations[11]. That wheat was known to the people of this region from the very beginning of their settlement is clear from the excavation at Kayatha[12] and Navdatoli[13]. Wheat and rice must have been known and eaten by the Aharians too. Barley, found from excavations, was also used as a staple food during chalcolithic period. In the beginning the early settlers of Malwa, during the chalcolithic times, have been using various kinds of legumes for their food such as : (1) Masur of lentil, (2) urad or black gram, (3) Mung or green gram, (4) Vatana (Hindi Bataka) or green peas, and (5) Lathyrus sp., besides, four other leguminous weeds are also found, the identification of which is not certain. A few remains of fruits are also found which are identified as Ber (Bor) and Amla. There are a few types of fruits also which are still unidentified[14].

During early historical period, the remains of grains and seeds have also been found from Nagda[15], and Ujjain[16].

The other evidences found from the levels of several sites in Madhya Pradesh have also attested to the food habits of the people. A number of saddle querns have been found at Navdatoli and Awara.

The roots of trees and plants from the forests were also used as food during the early periods of history.

The hearths have been found at Kayatha, Navdatoli, Nagda, Eran[17] and also at Sooron[18] and Ujjain. The hearths can be categorised as single, double and multi mouthed hearths (Pl. 3) which have been used according to size of family or multi mouthed hearths were used for groups.

Remains of fish bones, fish hooks and fish motifs on pottery indicate that fish was also used as diet during the chalcolithic and early historical periods.

Fish bones are found at Dangawada period IB (IV) (Chalcolithic)[19]. Fish hooks with perforation and broken tip are found at Nagda period III[20]. Hooks are reported at Awara in period III and IV[21]. These hooks are made of copper and iron. The hooks are found at Ujjain (C. 500-200 B.C.) made of iron[22]. One copper fish hook is reported at Maheswar too.

The domesticated animals were slaughtered for food, but whether their milk was consumed or not is problematic for it has been observed on the basis of ethnographic analogous, that the early farming communities may not have milked their cattle and sheep/goat[23]. Even the gonds of Bastar think that the milk is only for the young

animals and do not milk their cattle. But it seems to be an imagination only and not a fact. Probably during ancient times, the cattle and sheep/goat were milked at least for Children.

Apart from water, it is very difficult to say about the drinks of chalcolithic and early historical people. Different types of pottery and their shapes like bowls, which might have been used for some liquids during those days, indicate that people were fond of drinks.

Present flora of Madhya Pradesh is much helpful in reconstructing the history of drinks because it is one of the richest state where *Bassia lotifolia* (mahua) is produced in plenty. The flowers of this tree are still used for preparing liquor (Tadi) and is consumed by most of the tribals of Madhya Pradesh.

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Dr. R.A. Sharma
School of Studies in Ancient Indian History, Culture & Arch., Jiwaji University, Gwalior 474 011.

Explorations along the Kuwana River in Districts Gorakhpur and Basti

Purushottam Singh
Ashok Kumar Singh and
Indra Jeet Singh

Geographical Location

The vast tract of the alluvial land lying between the Himalayan foothills in the north and Vindhyan ranges in the south is known as the Ganga Valley because the mighty Ganga river forms the main drainage pattern of the region. This vast Ganga plain attained its present form during the post-Tertiary period when the trough was filled up by the fine alluvium. The average depth of alluvium is 1300-1400 m[1]. In this featureless plain the prehistoric Ganga flowed making new meanders and bursting old ones. The old meanders gradually formed horse-shoe lakes, some of which are perennial. These lakes abounded in aquatic fauna and the lands around them were covered with wild grasses many of which had edible grains[2]. With the onset of the milder climate of Holocene the marshy land or water-locked Ganga alluvium gradually turned into good grassland and sprouted with new type of grasses. These must have attracted small animals that survived mainly on grasslands and human populations from the Vindhyas followed these animals out onto the plains as shown by the archaeological excavations carried out by a team of archaeologists of the Allahabad University on sites like Sarai Nahar Rai, Mahadaha and Damdama in the Pratapgarh district. Today, the entire Ganga plain enjoys the monsoon climate in the true sense. The average rainfall decreases from 203.2 cm. in the extreme east to 63.5 cm. in the west with some local variations. The entire area has got the soil of alluvial nature and it is one of the most highly cultivated parts of India having more than 60% of the total area under cultivation. The region has been the centre of Aryan civilization and culture and several urban and religious centres like Ayodhya, Kashi, Gaya etc. flourished along the banks of major rivers.

The middle Ganga plain is clearly demarcated on the south and the north respectively by the peninsular front (150 m contour) and the Himalayan foothills (150 m contour) corresponding more or less to Indo-Nepal boundary line[3]. S.C. Singh had tried to delimit the boundaries of the Middle Gangha plain and observes that the 100 metre contour is the most useful indicator for deliminating this region. The western limit of Middle Ganga plain has been demarcated by him as follows, "The delimiting line marks the western boundaries of the tehsils of Utraula and Balrampur (Gonda district), Faizabad and Akbarpur (Faizabad district), Sultanpur (Sultanpur distict), Patti (Pratapgarh district) and Phulpur and Meja (Allahabad district). As regards the eastern limit of the Middle Ganga Plain the problem is rather easier. Here natural boundary i.e., the Old Kosi-Mahananda divide very easily solves our problem"[4].

The Saryupar region of the middle Ganga plain partakes of the similar geographical features as the vast Ganga plains. It also is a monotonous flat land sloping from the north-west (elevation 102 m) to south-east (elevation 70 m)

and forms a distinct geographical and cultural entity. The region has been classified into three broad divisions viz., (i) the Tarai (ii) Bhangar or the upland and (iii) the Kachhar or the flood-prone lowland. The tract running parallel to the foothills of the Himalayas known as the tarai is characterized by many streams, swamps, forest and heavy rainfall. It covers a great zone 80-90 km. wide but the expansion of human habitation has now restricted only to some 15-20 km.[5]. The *Bhangar* or upland extends over a larger area while the expansive Kachhar of the Rapti cutting diagonally across it, has considerably reduced its area and it is dotted with several lakes and abandoned river channels. The southern edge of the upland in the Gorakhpur district is skirted by the river Ghaghara whereas in the Basti district it is "sharply distinguished from the Khadar through a series of higher grounds, locally called as Dhus, marking the former bank of the Ghaghara[6]. The Sarayupar plain which is bound on the south and the west of the Ghaghara river, on the east by the Gandak extends upto the foothills of the Himalayas. The region of Sarayupar is a part of the Middle Ganga plain comprising mainly the present-day districts of Gorakhpur, Basti and Deoria. The region is drained by the several rivers, including the Ghaghara, Manwar, Kuwana, Rapti, Ami and Chhoti Gandak. Of these, the Ghaghara and Rapti emanate from the Himalayas. They assume enormous proportion during the rainy season and inundate vast low land area on their banks. The Ghaghara also known as Sarayu and Dehwa, is a mighty river flowing over a wide and sandy bed. The Kuwana (Kuana) springs from a lake having its source in the east of *Bahraich* and it flows through Gonda and Basti. It separates Gorakhpur district from the Basti district and then passes through the west of paragana Dhuriyapar of Gorakhpur district to join the Ghaghara near Shahpur. It is a meandering slow-flowing river with a deep channel. The little Gandak rises from the Siwalik ranges and has a narrow bed passing through stable land[7].

Previous Work Done in the Region

Archaeological investigations in the districts of Basti and Gorakhpur were carried out for the first time by A.C.L. Carlleyle[8] who explored some sites of archaeological importance in 1874-75 and 1875-76 under the guidance of Alexander Cunningham. Subsequently in 1890 A. Fuhrer explored some more sites and published his findings[9]. In February 1897 Vincent A. Smith suspected that Piprahwa might represent the ancient stupa. In the subsequent year W.C. Peppe excavated it and found the famous Piprahwa vase containing Buddha's relics, beads, crystals, gold ornaments, cut stars etc. In the year 1899 P.C. Mukherji[10] carried out archaeological investigations in the Nepal frontier. He identified Tilaurakot with Kapilvastu and supported fuhrer in his identification of the stupa of the Gothwa with Krakuchchanda's stupa and of the structures on the bank of the Sagar with the stupas commemorating the massacre of the Sakyas. Thus some of the sites located inBasti district were identified by these scholars with the sites associated with the life of Buddha for example Carleyle identified Kapilvastu with the ancient remains of Bhuiladih and Rummandei with remains between Shiupur and Budhapar in the southern part of Basti district. It may be noted that all these explorations were mainly carried out with a view to identifying the Buddhist sites in this region and the ceramic evidence so commonly used today in the exploration of early historical site was not utilised in those days. After the end of 19th century no significant archaeological investigation was done for the subsequent six decades and it was only in 1962-63 that a team of archaeologists of the Banaras Hindu University explored parts of Basti district under the supervision of A.K. Narain assisted by P.C. Pant and a few more new sites were brought to light[11]. In 1964, S.K. Bhatt[12] made a village-to-village survey of the Basti district and the adjoining areas. As a result altogether 67 archaeological sites belonging to the early historical period were located by him in tehsils Harraiya, Basti, Khalilabad, Bansi, Domariaganj and Naugarh. Some of these sites yielded black-and-red ware, both plain and painted N.B.P. ware and associated ceramic industries were found from a number of sites.

Recent Work in the Region

A fresh impetus to the archaeology of Ghaghara plain was given by the excavations of 150 acre mound of Sohgaura located on the confluence of the rivers Rapti and Ami by the Gorakhpur University. The first excavations in 1961-62 revealed the presence of chalcolithic culture characterised by the white painted black-and-red ware. The complete sequence of cultures at this site obtained mainly from a 5 mt. square trench dug on the north-western corner of the mound has been divided into six periods ranging from the Neolithic to the Medieval period[13]. The chalcolithic assemblage comprising periods II and III at the site has been dated by the radio-carbon method to 1335 ± 113 B.C. and 1235 ± 134 B.C.

Further details of this chaleolithic culture have been added by the recent excavations at Narhan conducted by the present author during 1983-1988[14]. These excavations besides adding new dimension to this culture have posed certain problems as well for example there is no lithic assemblage in this culture although the site has been excavated very carefully and systematically. Thus, it is no longer appropriate to name this culture as chalcolithic. Hence, we have proposed the name of this culture as "Narhan Culture" adhering to the good old practice of giving a name to the culture on the name of type-site i.e., where it has been discovered for the first time.

There are two mounds at Narhan. About two-third portion of Mound I has been washed away by Ghaghara river. The remaining one-third area of the mound is partly occupied by the present day Narhan village but an area to the west of the village, measuring about 350 x 25 metres is available for archaeological investigations. Excavations conducted during March-May 1985 and April-May 1986 at this site yielded remains of first two periods. The later three periods are represented at Mound 2, locally known at Chadihar, about ½ Km. to the north-east of Mound 1.

Period I (Black-and-Red Ware Culture) at Narhan is represented by approximately one metre of deposit. This fact is particularly important because at other sites of Black-and-Red ware culture, the average thickness is from 30 to 50 cm. only. Secondly, Black-and-Red ware at Narhan accounts for 57.7% in the total pottery of the Period I, while it accounts for less than 3% (2.58%) in the Neolithic levels of Koldihwa. In fact this percentage has been found to be as high as 74% in the lowest levels of Period I during 1985-86 at Narhan. A similar situation obtains at Chirand. At Atranjikhera Black-and-Red ware and black slipped ware put together account for nearly 50%.

The first settlers of Narhan lived in wattle and daub houses. Remains of post-holes and reed marks in burnt clay lumps, two successive floors, ovens and hearths have been found. Mention may be made of a curious looking hearth, partly excavated in one of the trenches. A similar cluster of ovens has been found in the Neolothic levels at Chirand. Pits cut into the natural soil were noticed in several trenches. A good quality of archaeobotanical remains obtained by flotation give a fair idea of the agricultural practices of these peole. Cereal grains of hulled and six-row barley *(Hordeum vulgare)*, club wheat *(T. compactum)*, bread wheat *(T. aestivum)*, dwarf wheat *(T. sphaeorococcum)* and cultivated rice *(Oryza sativa)* have been identified. The pulses include pea *(Pisum sativum)*, green gram (mung : *Vigna radiata)*, gram/chick pea *(Cicer arietinum)*, Khesari *(Lathyrus sativus)* besides mustard oilseeds and flax/linseed. Seeds of Jackfruit *(Artocarpus integrifolious)* found from levels is an important discovery. Jackfruit grows wild in the western Ghats and was taken to cultivation in north India. The present evidence suggests that the Narhan inhabitants cultivated it for its fruit. Although the first settlers practiced agriculture, meat was an important component of their diet as is evidenced from the presence of a large number of charred animal bones and antlers, some of them having cut marks. In a limited collection of about 15% animal bones excavated during 1984-85 from Period I, bones of humped Indian cattle *(Bos indicus)*, sheep-goat *(Ovis/Capra)*, remains of a wild ruminant like deer or antelope *(Axis sp.)* and horse *(Equus sp.)* have been identified.

The small finds include pottery discs in large numbers. Of these, four pieces are perforated and these might have been used as toy cart wheels. Bone points account for 21 pieces and nine terracotta dabbers and two balls, one each of terracotta and stone, have been recorded. A solitary stone bead and one micro bead of steatite were also found. Stone-chips (microliths) available at other sites like Chirand, Koldihwa and Sohgaura, have not been recorded so far. An iron object about 13 cm. long, was reported from the topmost deposit of Period I during 1985-86.

The main ceramic industries are the white painted Black-and-Red ware (57.70%), black-slipped ware with occasional paintings in white (8.01%), red slipped ware (8.84%) and plain red ware (25.38%). The principal pottery types in Black-and-Red ware are bowls (66.90%), basins (11.0%) and vases (22.09%). A complete dish-on-stand of this ware had been reported from this site earlier. Several pieces of this vessel type were found in the excavations during 1985-86. Some new shapes like the deep bowls with paintings inside were recorded during this season. However, dishes are conspicuous by their absence in the Black-and-Red ware. More than 20% sherds in the fine and medium fabrics of the Black-and-Red ware are painted. The principal types in the black slipped ware consist of bowls (83.71%), dishes (14.95%) and vases (1.21%). The quantity of basins and vases is extremely limited. In the red slipped ware the dominant category is that of bowls (68.70%) followed by basins (23.89%), vases

(7.32%) and dishes (2.04%). The red ware has bowls (50.18%), vases (29.86%), basins (15.51%) and dishes (4.44%).

The new designation of "Narhan Culture" for the above assemblage was announced in the annual conference of the Indian Archaeological Society held at Viswa-Bharati, Shantiniketan in 1988 and the most legitimate question asked was, what is the extent of this new culture.

Explorations Done in the Area

To know the further extension of this "Narhan Culture" the present authors started a village-to-village survey along the rivers Kuwana and Ghaghara. As the result of this exploration, about a dozen of Black-and-Red ware sites were discovered. The ceramic assemblage and other antiquities of these sites belong to the cultural deposits of Period I at Narhan. The pottery repertoire of these explorations include Black-and-Red ware. At sites like Sikridih and Imlidih the Black-and-Red ware pottery was recovered in large quantities indicating the richness of this culture. The shapes in Black-and-Red ware are identical to those of Narhan. These comprise bowls, basins, vases and a few pieces of dishes-on-stand. Dishes were found to be absent in the Black-and-Red ware as in the case of the type-site. The shapes in this ware comprise pedestal bowl, dishes-on-stand, deep bowl with everted rim, comparable with Narhan, Pandu Rajar Dhibi and Chirand. Two sherds of Black-and-Red ware of medium fabric are painted. The painting done in pre-firing stage, is essentially linear and has been executed in dull white colour over black surface on the interior of the vessel. The following sites having the characteristic white painted black-and-red ware and the associated antiquities give a fairly good idea of the extent of Narhan culture.

Tulsi Diha/Digha

This site is situated about 12 Km. north-west of Sikriganj in district Gorakhpur. It extends in about 10 acres and is well preserved. There is no modern habitation or agricultural activity on the mound. Sherds of Black-and-Red ware, black slipped ware, N.B.P.W. and red ware were recovered. This mound was inhabited upto the Gupta period.

Ammadei

This site is situated 2 Km. east of Mukhalispur in district Basti. About two-third of the mound has been washed away by river Kuwana. Sherds of Black slipped ware, red slipped ware and red ware were recovered but in this case the principal industry is black slipped ware. Fine bowls and vases in this ware are recovered. Besides, some new shapes were also found. Lipped basins of red ware were also picked up. This site was very rich during the Kushana and Gupta periods and structures ascribable to these periods were found fome time back by the villagers which have now been badly disturbed.

Gaighat

This mound is situated about 3 Km. east of Mukhalispur. It extends in an area of about 10 acres. A few sherds of dish-on-stand/pedestal bowl of Black-and-red ware were picked up. Presently, the site is under intensive agriculture and has been almost flattened by the villagers.

Kodwat

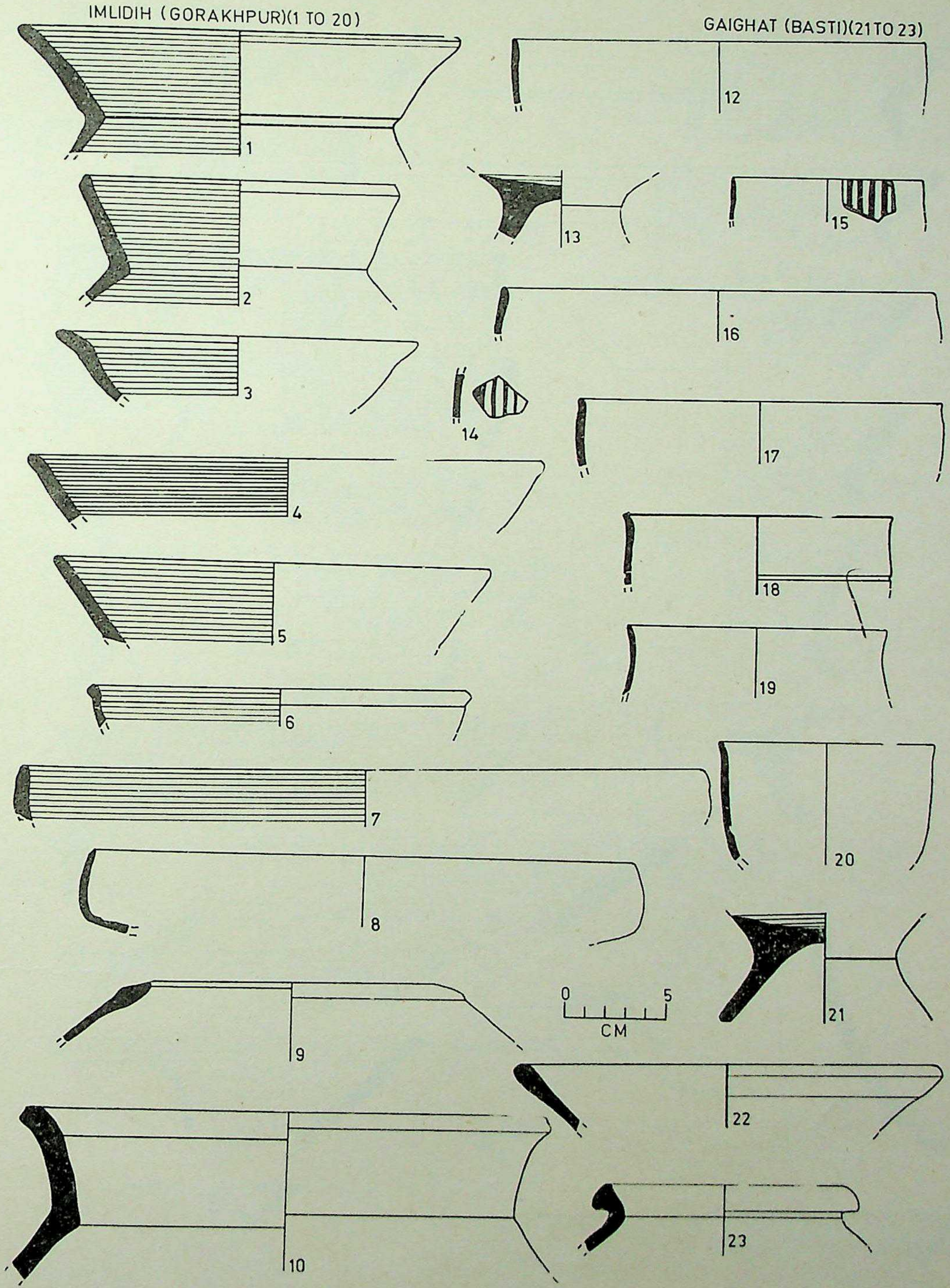
This site is spread over an area of about 5 acres and it seems to be a part of neighbouring mound of Karuhi. Extensive agriculture is now done on the mound. Sherds of Black-and-Red ware and red ware comprising Ahichchatra 10A type were picked up from the surface.

Sikridih

This mound is situated near Sikriganj on the Gola-Gorakhpur road. It extends in about 10 acres. This is a single culture site comparable with Narhan. Sherds of Black-and-Red ware were recovered in substantial quantities. Other important ceramic industries of this site were Black slipped ware, red slipped ware and red ware. A few painted sherds of B.R.W. were also picked up. Presently, the site is under intensive agriculture and has been almost flattened by the villagers.

Imlidih

This mound is situated near Sikriganj on the Gola-


IMLIDIH (GORAKHPUR)(1 TO 20)
GAIGHAT (BASTI)(21 TO 23)
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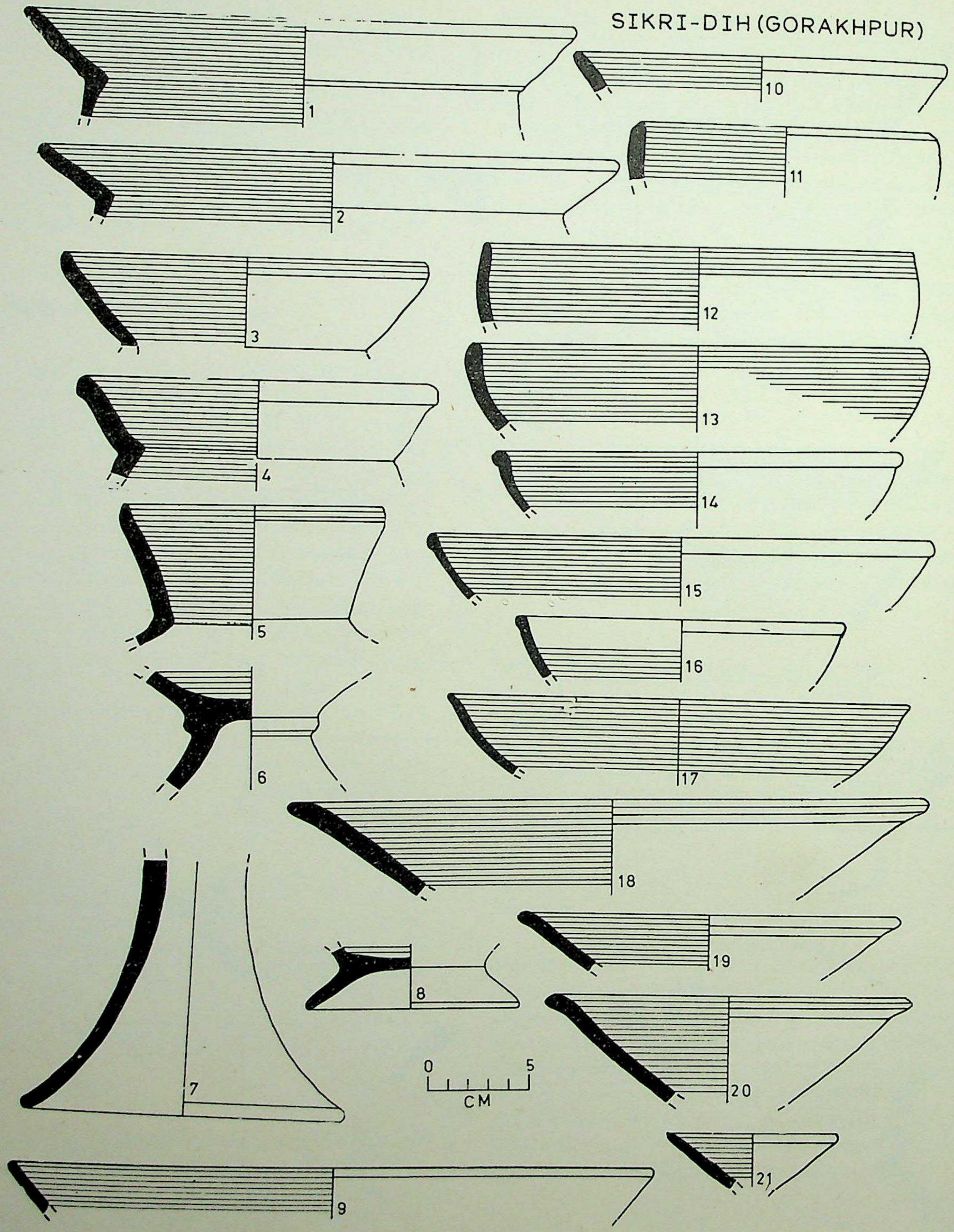
SIKRI-DIH (GORAKHPUR)
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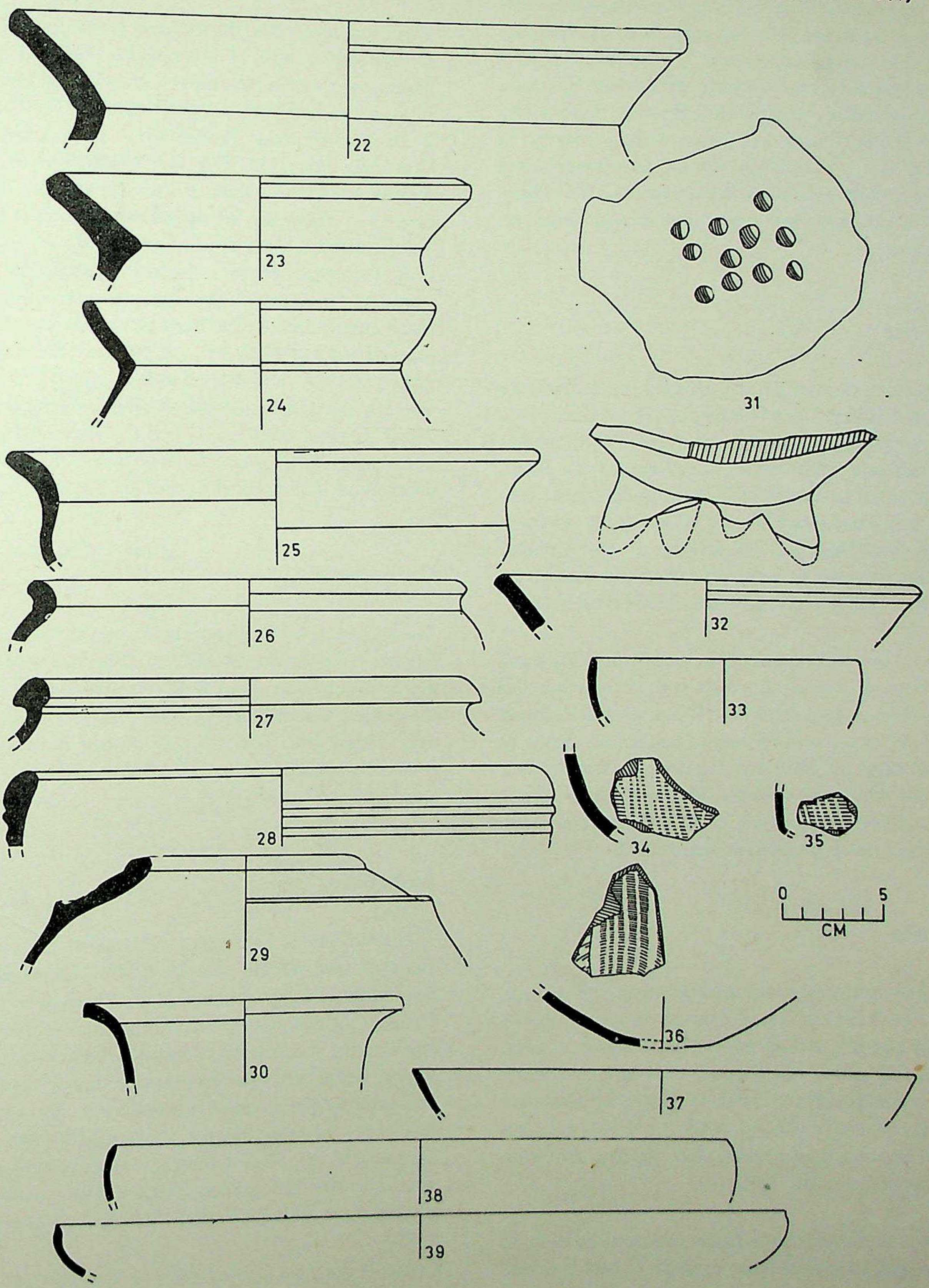
SIKRI-DIH (GORAKHPUR)



Gorakhpur road. It extends in about 15-20 acres. The present day Imlidih village is situated on the eastern part of the site. This site is comparable with Narhan and Sikridih. It is a single culture site. The cultural deposit is not more than 3-5 metres. Sherds of Black-and-Red ware were recovered in substantial quantities. Shapes like pedestal bowls, basins and vases were recovered in black-and-red ware. In black slipped ware the principal shapes are bowls and dishes. A few painted B.S.W. were also picked up. This site is well preserved and there is no later deposit.

Dhuriapar

This mound is situated on the left bank of the Kuwana river, about 46 Km. from Gorakhpur. The history of the place may be said to begin with the invasion of Kaushikas under their raja, Dhurchand. He drove out the Bhars when he found possession of it in the middle of the 14th century and established himself all along the northern bank of the Ghaghara. According to the tradition Dhurchand founded after his name Dhuriyapar which for a long time was the strongest seat of the Kaushikas.

The mound extends in about 20 acres area and has a cultural deposit of approximately six metres. The principal ceramic industries are Black-and-Red ware, black slipped ware, N.B.P. ware and red ware. Bowls and dishes of BSW and vases of BRW were the principal shapes. This mound was inhabited upto the Medieval period. Burnt brick structures of Kushana and Gupta periods were seen in the eroded sections of the mound.

Madaraha

This mound is situated on the left bank of river Ghaghara, about 3 Km. from Narhan. It extends in about 3 acres. The main ceramic industries are Black-and-Red ware, black slipped ware, red slipped ware and red ware. Dishes-on-stand/pedestal bowl of black-and-red ware and bowls of black slipped ware were the principal shapes. A few sherds of painted black slipped ware were also picked up from the surface.

Besides the above-mentioned sites explored by us there are other sites which has been brought to light in recent years.

Khairadih

This site is located on the left bank of the Ghaghara river on the tri-junction of Azamgarh, Deoria and Ballia districts but technically falling in the revenue jurisdiction of Ballia. It has been under excavation by Prof. K.K. Sinha and Birendra Pratap Singh of Banaras Hindu University during 1980-1986. But the Black-and-Red ware deposit could be identified only during the last two seasons[15]. There are almost all the features of Narhan culture present at the site, the only significant difference being the preponderance of white painted black slipped ware and the diminishing percentage of the white painted Black-and-Red ware. There are three radio-carbon dates from period I of Khairadih which read 1120 ± 90 B.C.; 1030 ± 160 B.C. and 940 ± 150 B.C. which fit quite well with the dates obtained from Narhan which are 1100 ± 110 B.C. and 1060 ± 110 B.C. These dates also correspond with the two dates obtained from Sohgaura which read 1335 ± 113 B.C. and 1235 ± 134 B.C.

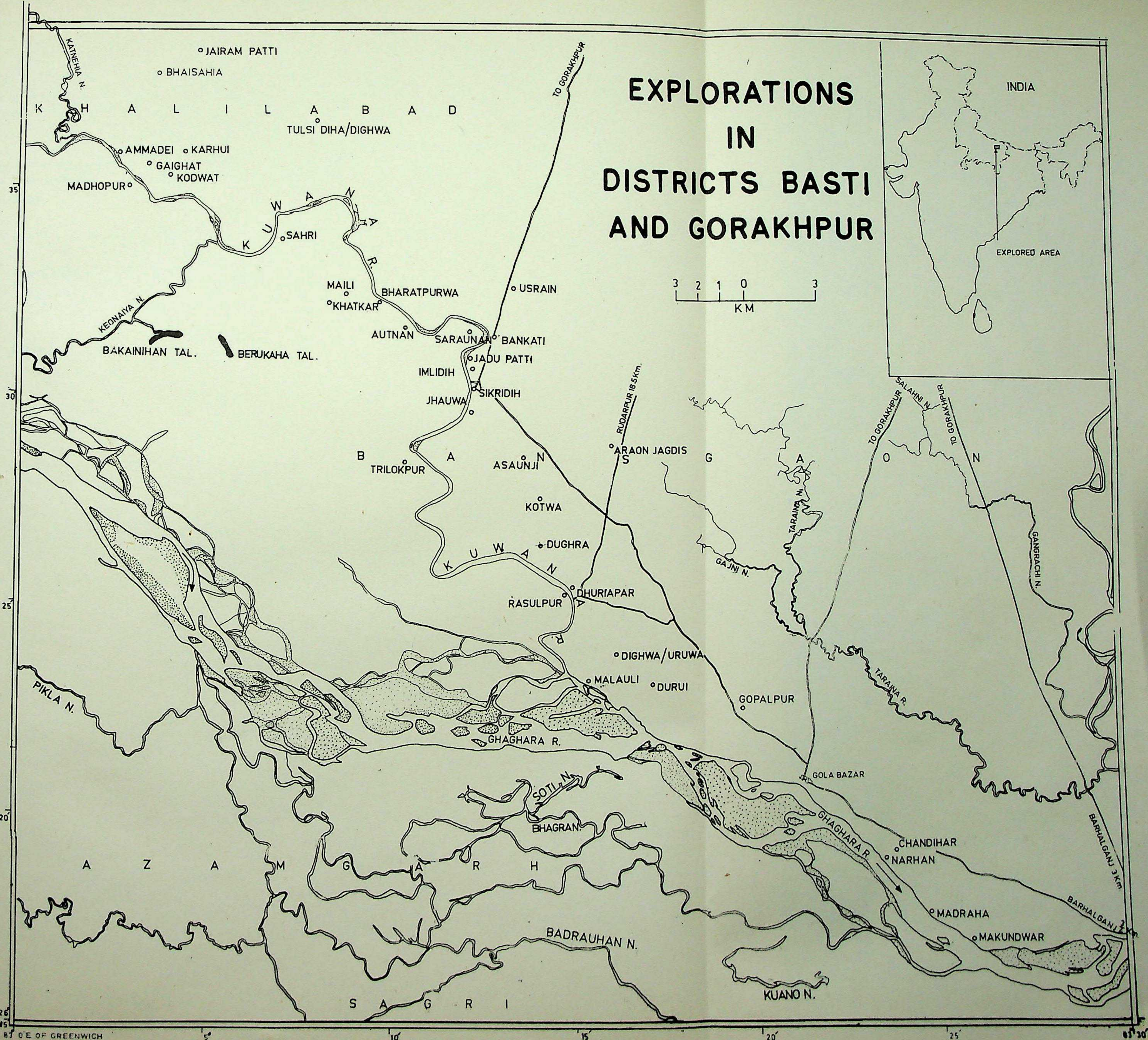
Brahmapur

There are two ancient settlements on the old bed of the Sarayu in the Azamgarh district. The most note-worthy site is Brahmapur about 2 Km. to the west of Latghat located on the national highway connecting Azamgarh and Gorakhpur. The site has yielded Black-and-Red ware, Black slipped ware, N.B.P.W., corded ware grey ware and red ware[16].

Lalmanpur

The third site is Lalmanpur situated in the Koyalasa Development Block, about 4 Km. north-west of Burhanpur which is situated on the Azamgarh-Faizabad highway. At this point the old Sarayu makes the dividing line between the districts of Azamgarh and Faizabad. The ancient settlement extends on both banks of this old river bed extending in an area of several acres. Part of this site falls in the Faizabad district. Presently, the site is being damaged by the villagers who have made brick-kiln at this site. The site has yielded Black-and-Red ware, black slipped ware, N.B.P.W., grey ware and red ware[17]

Some of the sites yielded relics of later periods like the N.B.P. ware along with other associated potteries, Kushana and Gupta burnt brick structures and


EXPLORATIONS IN DISTRICTS BASTI AND GORAKHPUR
INDIA
EXPLORED AREA
3 2 1 0 3
KM
K H A L I L A B A D
JAIRAM PATTI
BHAISAHIA
KATNEHIA N.
TULSI DIHA/DIGHWA
AMMADEI
KARHUI
GAIGHAT
KODWAT
MADHOPUR
K U W A N A R.
SAHRI
MAILI
KHATKAR
BHARATPURWA
USRAIN
KEONAIYA N.
BAKAINIHAN TAL.
BERUKAHA TAL.
AUTNAN
SARAUNAN
BANKATI
JADU PATTI
IMLIDIH
SIKRIDIH
JHAUWA
TO GORAKHPUR
RUDARPUR 18.5 Km.
ARAON JAGDIS
B A S N
TRILOKPUR
ASAUNJI
KOTWA
DUGHRA
K U W A N A R.
DHURIAPAR
RASULPUR
G O N
SALAHNI N.
TARAINA N.
GAJNI N.
GANGRACHI N.
DIGHWA/URUWA
MALAULI
DURUI
GOPALPUR
TARAINA R.
PIKLA N.
GHAGHARA R.
GOLA BAZAR
SOTI N.
BHAGRAN
GHAGHARA R.
CHANDIHAR
NARHAN
BARHALGANJ 3 Km
A Z A M G A R H
MADRAHA
MAKUNDWAR
BARHALGANJ 3 Km.
BADRAUHAN N.
KUANO N.
S A G R I
35'
30'
25'
20'
26°
15'
83°0'E. OF GREENWICH
5'
10'
15'
20'
25'
83°30'

antiquities indicating that some of these sites continued to be inhabited by subsequent dwellers as in the case of Narhan. A complete list of these sites explored so far on the banks of Kuwana and Ghaghara rivers in districts of Basti and Gorakhpur is given below.

LIST OF EXPLORED SITES IN DISTRICT GORAKHPUR

No.	Name of the Site	Tehsil	Ceramic Industries	Other finds	Previous references, if any	Remarks
1.	Aron-Jagdish	Bansgaon	Black-slipped ware and red ware.	Terracotta Pestle		A tube-well is under construction on the mound.
2.	Asounji	Gola	Black-and-Red ware, red, ware.			
3.	Bankati		BSW, RW and Ahichchhatra 10A.	Kushana and Gupta bricks		
4.	Bharwalia	Khajni	Black-and-red ware, black slipped ware and red ware.			
5.	Dhuriyapar	Gola	Black-and-red ware, black slipped ware, red slipped ware and NBP ware.	T.C. Human and animal figurines, T.C. Pestle, T.C. beads and disc. Stone sculpture of Vishnu, Kushana, Gupta and Medieval structures.		Contains remains of a big city.
6.	Dughra	Gola	Grey ware, N.B.P. ware, red ware.			Comparatively intact site.
7.	Duruie	Gola	BSW, GW, RW and cord-impressed pottery.	Terracotta human figurines, T.C. Pestle, copper coins Kushana and Gupta structure.		The mound extends over an area of about 20 acres. The mound is completely disturbed completely disturbed due to construction of lift canal (Baranagar). This mound is situated on the confluence of Kuane and Ghaghara and presents remains of a large town.

No.	Name of the Site	Tehsil	Ceramic Industries	Other Finds	Previous reference, if any	Remarks
8.	Gopalpur	Gola	Black slipped ware and red ware.	Broken T.C. human figurine.		
9.	Imlidih	Khajni	Plain and painted black-and-red ware, plain and painted black-slipped ware, red slipped ware, NBPW and associated red ware.	T.C. balls and waste stone flasks.		A chalcolithic site. The shapes are very common like Narhan. A modern masjid is situated on the mound. Half portion of the mound is inhabited by the present people.
10.	Jaddupatti	Khajni	Black-and-red ware, grey ware, black slipped ware, red ware.	x		The present day Jadupatti village is situated on the mound.
11.	Jhauan		Red ware	x		An early historic site.
12.	Kotwa	Khajni	Black slipped ware; red ware.	x		
13.	Madrha	Gola	Black-and-red ware, black slipped ware, red ware.	x		
14.	Malauli		Red ware	x		An early historic site.
15.	Mukundwar	Gola	Red ware	Terracotta human figurine		Suspected to be big city, the mound is occupied by the present day village of that name.
16.	Rajdhani		Black slipped ware, red ware.	Stone sculpture of Shiva		The mound is badly disturbed because of intensive agriculture.
17.	Rasulpur		Red ware	T.C. animal figurine		Early historic site.

No.	Name of the Site	Tehsil	Ceramic Industries	Other finds	Previous reference, if any	Remarks
18.	Sikridih	Khajni	Plain and painted black and red ware, plain and painted black slipped.	x		Half portion of the mound is inhabited by present day people.
19.	Tulsidiha-Dihwa	Khajni	Black-and-red ware, black slipped ware, NBP—red ware, cord-impressed pottery, Ahichhatra 10A.	Terracotta pestle, pottery disc.		Chalcalithic site, Fortification walls are still visible on the mound.
20.	Trilokpur	Bansgaon	Red ware	x		
21.	Uruwa-Dighwa	Gola	Grey ware, black-slipped ware, red ware.	T.C. Pestle		Mound is inhabited by present day village of this name.
22.	Usrajn	Khajni	Black slipped ware, red ware, Muslim-Glaze ware.	T.C. Bead		

LIST OF EXPLORED SITES IN DISTRICT BASTI

No.	Name of the Site	Tehsil	Ceramic Industries	Other Finds	Previous reference, if any	Remarks
1.	Ammadei	Khalilabad	Black-and-Red ware, black slipped ware, red slipped ware, N.B.P. ware, red ware and cord-iompressed pottery.	Terracotta bead	x	A Chalcolithic site, about 2/3 portion of the mound has been washed away by river Kuana.
2.	Autnan	—do—	Black slipped ware and red ware.	x	x	The mound is disturbed due to intensive agriculture.
3.	Bhaisahia	—do—	Red ware	Terracotta figurines of Gupta period and Terracotta bead	x	
4.	Bharaturwa	—do—	Grey ware, red ware, early historic cord-impressed pottery.	Kushana and Gupta bricks	x	The present day Bharatpurwa village is situated on the mound
5.	Gaighat	—do—	Black-and-Red ware and red ware.	x	x	This mound extends in about 10 acres.
6.	Jairampatti	—do—	Red ware, handled Karahi of RW.	Pieces of Kushana terracotta figurine.	x	
7.	Karuhi	Khalilabad	Black-and-Red ware, black slipped ware, grey ware and red ware, having Ahichhatra 10A type.	Terracotta ball	x	A chalcolithic site. The total deposit of the mound is approximately 3 metres.
8.	Khatkar	—do—	Black slipped ware, grey ware, red ware and cord-impressed pottery	Terracotta pestles and upper portion of sprikler	x	The mound comparatively is intact and extends in about 10 acres.
9.	Kodwat	—do—	Plain black-and-red ware and red ware	Stone quern with four legs	x	A Chalcolothic site. This mound extends in a large area.

LIST OF EXPLORED SITES IN DISTRICT BASTI

No.	Name of the Site	Tehsil	Ceramic Industries	Other Finds	Previous reference, if any	Remarks
10.	Kopia	—do—	Black slipped, grey ware, red ware, Muslim glazed ware.	Terracotta figurines, brick structures.	Fuhrer, *AS. I*, II, 1891; 224 and *'Bharati'* 8, I, 120; S.K. Bhatt, *Puratattva* No. 3, 1969-70; 85.	A fortified town surrounded by a moat. The present day village of Kopia is built by bricks of the mound.
11.	Lahura Deva	—do—	Painted and plain black and red ware, painted and plain black slipped ware, cord-impressed pottery, NBPW, grey ware and red ware.	Terracotta pestles.	S.N. Chaturvedi in *Puratattva* No. IX, 1985, 105.	A chalcolithic site.
12.	Madhopur	Khalilabad	Red ware, red ware having Ahichchhatra 10A type.	T.C. animal figurines	x	
13.	Mahuli	—do—	Red ware	Kushana, Gupta and Medieval structures.	x	A fortified town surrounded by a ditch.
14.	Malli	—do—	Red ware	x	x	
15.	Malauli	—do—	Red ware	Kushana and Gupta bricks	x	Circular mound
16.	Mirgaon	—do—	Red ware	Kushana and Gupta bricks	x	Present village of Mirgaon is situated on the mound and the Khalilabad-Basti road (N. H. 28) divided this mound into two parts.
17.	Sahri	—do—	Red ware	Gupta bricks are scattered.	x	
18.	Samoghar	—do—	Red ware	Stone sculpture of Vaishnavi	x	The present day temple of Shiva is constructed on the mound.

Conclusion

Our limited exploration on the Kuwana and Ghaghara river system indicates that Narhan culture spread over a wide area from Basti to Ballia districts (as indicated by the excavation of Khairadih). Systematic and sustained work on the bank of the other smaller tributaries of this region like the Manwar, the Ami and others will provide a fuller picture, not only about the extent of this culture but also about the nature of the settlement, the density of population and ecological background etc.

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Prof. Purushottam Singh, Dr Ashok Kumar Singh and Indra Jeet Singh

Department of Ancient Indian History, Culture & Archaeology, B.H.U., Varanasi.

Crop Economy at Ancient Mahorana, Punjab (C. 2100-1900 B.C.)

K.S. Saraswat

Introduction

The village Mahorana (Lat. 30°28′N : Long. 76°E) is situated about 8 km. south-west of Manerkotla township on the Nabha-Ludhiana highway, in District Sangrur of Punjab. A massive mound in the revenue limits of this village, occupies the sizable part of the ancient habitational site. The archaeological excavations were carried out on this mound by Punjab University, Chandigarh, under the direction of Professor Y.D. Sharma. The mound revealed four-period occupation from Pre-Harappan to Medieval times.The lower most deposit of Preharappan occupation is subsequently followed by Black-Slipped-cum-Painted-Grey Ware culture, Kushana culture and finally Medieval culture at the top. Pre-Harappans occupied the site for a long period. Their average deposit measures three metres in thickness. This earliest phase (Period-I) has been split up into two sub-periods, IA and IB. Pre-Harappan pottery dominates in the lowermost region referred to as sub-period IA, while in upper region (sub-period IB) Bara pottery is in ascendency. Beginning of Bara culture seems to be derived from Pre-Harappan traditions[1] and its pottery forms parallels with Harappans, in the region of Punjab, Haryana and some parts of western Uttar Pradesh. Thus, gradual transformation of pre-Harappan culture to Bara culture is witnessed at Mahorana, during the sub-period IB.

The remains of carbonised seeds and fruits reported here, were recovered by the excavator from trench MRN. UX-41 ; Layer-8 in the deposits of sub-period IB. Wood charcoals have bern found to be of frequent occurrence almost in all the cultural periods, but the food grains have been recovered only from this period. Study of these remains would be of particular interest since hitherto no information is known from the phase of transformation of pre-Harappan to Bara culture. The date of period-I of Mahorana is a matter of conjecture. Keeping in view the age of pre-Harappan settlement at Kalibangan, Rajasthan and Bara cultures in Punjab and Haryana, the excavator has regarded the time-bracket of period I from Ca. 2300 to 1900 B.C. Sub-period IA of Pre-Harappan occupation is contemplated from Ca. 2300 to 2100 B.C. and its transformation to Bara culture in sub-period IB from Ca 2100 to 1900 B.C.[2]

The grain sample was of mixed contents. Cereal grains of wheat and barley and the leguminous seeds belonging to lintil and hyacinth-bean in complete and broken condition, were found mixed with small pieces of wood charcoal and ash. Three complete seeds of grape were also recovered. It has been a formidable task to refer every broken piece of grains and seeds to respective species. The variation in the shape and size of broken pieces is so wide that discrimination is very difficult. Moreover, some of the complete grains are found extremely deformed and altered by heat or damaged by

puffing. Only a limited number of grains and seeds which have permitted safe identification, have been described in the present paper. It is also important to keep in mind that excavation work at Mahorana was on a limited scale. Accordingly the finds give only a limited insight into the subsistence economy. There were probably other food plants as well, but their certain evidence is lacking.

Description of food grains and seeds

1. Hulled-barley *(Hordeum vulgare* L. emend. Bowden) (Pl. 1.1).

Barley grains exceed in quantity at the expense of other grains in the collection. In all, 33 complete grains have been encountered. Some of the grains are unevenly shrunken and mutilated due to excessive carbonization. Disparity in the shape and size of the grains is very conspicuous. They measure 4.75-6.00 mm in length, 2.50-3.70 mm in breadth and 2.00-2.50 mm in thickness. The elongated grains have flattened dorsal side and longitudinal furrow on their ventral side, gradually widens and becomes shallow towards the upper end. Hilum lies on the pointed beak-like projection, on the dorsal side. Grains are angular in cross view. On their surface, longitudinally running and faint striations of husk-veins are perceived at places, under high magnification of stereobinocular microscope. Some large to medium-sized grains are straight, showing distinct bulge in the middle. On the other hand, smaller grains are assymmetrical in appearance and show ventro-lateral twisting. The grains have been identified as belonging to the six-row form of hulled barley.

2. Naked-barley *(Hordeum vulgare* L. emend. Bowdenvar. *nudum.* (Pl. 1.2)

Two grains differ considerably in their shape and size from the grains of hulled barley. Measuring 3.50-4.00 mm in length, 2.30-2.70 mm in breadth and 2.00-2.50 mm in thickness, they appear to be much broader in relation to their length. In cross view, grains are almost circular in outline. Because of the absence of thick husk, they appear to be hull-less or naked. Slight rippling in transverse plane due to the contraction of thin pericarp, is also visible on the ventral cheeks along the furrow. In overall view, the grains are comparable to naked barley.

3. Dwarf-wheat *(Triticum sphaerococcum Perc.)* (Pl. 1.3).

Five caryopses, in spite of some puffing, are rounded to oval-round in shape. They measure 2.70-3.70 mm in length, 2.40-3.50 mm in breadth and 2.25-3.00 mm in thickness. Dorsal side is either broadly rounded or somewhat flattened. Due to excessive carbonization, pericarp has partly been rubbed off and broken. In all the morphological features, the grains compare with those of dwarf-wheat.

4. Club-wheat *(Triticum compactum* Host.) (Pl 1.4)

Two grains have been recovered, one complete and other broken. Complete grain measures about 5.40 mm in length, 3.00 mm in breadth and 2.50 mm in thickness. Both of them have a roundd and broad apex. Basal end in complete grain is narrower. Dorsal side is smoothly rounded and somewhat raised on the broader end. Ventral cheeks are more or less flattened. Furrow on the ventral side is deep and running from end to end. In the light of these characters, the grains show their close affinity to club-wheat and have, therefore, been identified as such.

5. Hyacinth-bean *(Lablab purpureus* (L.) Sweet ; Syn. *Dolichos lablab* L.) (Pl. 1.5).

Only two cotyledons have been recovered, one complete and other broken. Complete cotyledon measures 5.20 mm in length, 3.50 mm in breadth and about 2.25 mm in thickness. In view of size and shape of cotyledon remains, the complete seeds must have been quite large and variable from round to somewhat oval round in shape. Raised portion of raphe on the lateral side of complete cotyledon, is noticeable. It measure about 2.60 mm in length and covers roughly two-third of seed length. In hyacinth-bean hilum is above the level of seed surface, along a prominent raphe running 2.00-2.80 mm in length. In shape, size and the peculiar features of raphe, the unknown cotyledons compare with those of *Lablab purpureus* and, therefore, referred to the same.

6. Lentil *(Lens culinaris* Maedik) (Pl. 1.6)

Two seeds measuring 2.75-3.00 mm in diameter and 1.70 mm in thickness, have retained much of their lenticular shape in spite of some puffing. The hilum is very small, lenticular in shape and situated on the keeled margin of

seeds. The seed coat has partially been rubbed off. In size and shape, the carbonised seeds compare with those of lentil.

7. Grape seeds *(Vitis vinifera* L.) (Pl. 1.7)

Three pyriform seeds in carbonised state, measure 3.80-5.00 mm in length, 2.50-3.50 mm in breadth and 2.20-3.00 mm in thickness. They have two furrows framing a solid ridge on their ventral side. Dorsal side is domed, characterized by a shield-like circular area. All the three seeds have thick and extended stalks. Based on these morphological characters, the seeds are comparable to those of grape (*Vitis* species).

Fruits of both the wild and cultivated varieties of *Vitis vinifera* may be eaten and their seeds are also more or less similar. The variation in the shape and size of the seeds even within the same fruit may, however, be wide ranging. Therefore, discrimination as to the quality of these three seeds is not warrantable on the comparative basis. However, the differentiation of wild and cultivated grape seeds on the basis of their shape and length-breadth ratio, is possible when they are recovered in enough quantity. To arrive at a conclusion, the evidence of grape cultivation by pre-Harappans at Rohira in the same region[3] deserves consideration in the present context. Evidence of grape-wood charcoals and a seed from Rohira, has given substantial body of information about the cultivation of grapes in Punjab, during the Harappan times. The sweet raisins also must have been brought by inhabitants at Mahorana, from elsewhere. In view of these facts, the carbonised grape seeds may safely be referred to some cultivated form of *Vitis vinifera,* which is most important and universally cultivated species of grape-vine.

Discussion and Archaeological Significance

The carbonised food grains and seeds from Mahorana, comprise cereals belonging to hulled barley *(Hordeum vulgare)*, naked barley *(H. vulgare* var. *nudum)*, dwarf wheat *(Triticum sphaerococcum)* and club wheat *(T. compactum)* ; two leguminous crops-lentil *(Lens culinaris)* and hyacinth bean *(Lablab purpureus)*, and grape seeds *(Vitis Vinifera)*. Both hulled and naked barly and the wheat grains belonging to *Triticum sphaerococcum* (dwarf wheat), *Triticum compactum* (club wheat) and *Tritucum aestivum* (bread wheat), are known to have been used by Harappans in Indus Valley. A sizable quantity of hulled and naked forms of barley, along with chick-pea *(Cicer arietinum)* and field-pea *(Pisum arvense)*, was found at Kalibangan in Rajasthan from the pre-Harappan period, Vishnu-Mittre and Savithri, 1982. Rohira is another site in Sangrur District of Punjab, about 22 Km. apart from Mahorana from where hulled barley *(H. vulgare)*, dwarf wheat *(T. sphaerococcum)*, emmer wheat *(T. dicoccum)*, Sorghum millet (Sorghum bicolor), Lentil *(Lens culinaris)*, horse-gram *(Dolichos biflorus)*, date stone *(Phoenix dactylifera)* and a grape seed *(Vitis vinifera)* have been found in pre-Harappan period, dating back from 2300 to 2000 B.C.[5]. At the same place, from mature Harappan period (2000-1700 B.C.) naked barley (H. *vulgare* var. *nudum)* and fenugreek *(Trigonella foenum-graecum)* are the new finds, in addition to hulled barley, dwarf wheat, emmer wheat, lentil and horse-gram which are of the same kinds as from the preceding pre-Harappan period[6]. The presence of hulled and naked forms of barley, dwarf wheat, club wheat and lentil at Mahorana, adds further evidence of these crops.

The evidence of hyacinth bean *(Lablab purpureus)* at Mahorana is the earliest, so far recovered in India and has been discussed for the first time in Harappan context. It happens to be a popular vegetable crop and needs frequent irrigation. This has brought to light for the first time the evidence of responsiveness of the skilled pre-Harappan or Baran farmers, to intensive management practices for the cultivation of vegetable legume. The plant of hyacinth bean is a perennial, creeping or twinning herb of Asian origin, generally cultivated as an annual. There are two varieties, one cultivated as a garden crop and other a perennial in varying degrees, grown as a field crop. According to Prain[7], these varieties are not distinguishable from each other and there has been a great deal of confusion with regard to their characters and composition. Variety *lignosus* is semi-erect and bushy herb, grown as a field crop in the peninsular India. It is not grown in northern India for the reason of its excessive susceptibility to cold and frost. Cultivated in the plains of northern India is the variety *typicus*, which is grown as a garden crop near the houses of natives ; the climbers are allowed to trail on nearby shrubs or on the artificial support of sticks[8]. In the region of Punjab, temperature in winter season falls up to 2-3° celsius. Therefore, the cultivation of *lignosus* variety of hyacinth bean which is grown as a field crop in Southern India,

remains out of question in Punjab. Some form of variety *typicus* or an ecospecies of *Lablab purpureus* which could sustain the severe cold and frost must had been cultivated by the settlers at Mahorana, as a garden crop. This would, indubitably, have demanded rather a different set of skill and techniques. It appears that assured irrigation and high intrinsic soil fertility would have been maintained for the cultivation of this vegetable legume.

Hyacinth bean is reported from several archaeological sites in Maharashtra. Some of the important findings date back to 1600-700 B.C. at Inamgaon, district Pune ; 1000 B.C. at Daimabad, district Ahmednagar ; 750-450 B.C. at Bhagimohari, district Nagpur ; 250-50 B.C. at Nevasa, district Ahmednagar ; 200 B.C.-200 A.D. at Bhokardan, district Aurangabad and to 150 B.C.-250 A.D. at Ter in district Osmanabad[9]. It has also been found in Gujarat at Prabhas Patan, from early historic times[10]. The general agricultural techniques would have been required for the cultivation of hyacinth bean in Maharashtra. On the other hand, its occurrence in the context of Harappan culture-complex of Punjab, has specific significance as a garden crop. This is certainly a great advancement in arbori-horticulture over the general agricultural practices.

Equally interesting are the grape seeds (*Vitis vinifera*) reported from this site. Grapes are the rich source of fructose and glucose. Generally, the evidences of *Vitis vinifera* in archaeological sites are represented in seed remains. It is entirely conceivable that the dried grapes in the form of sweet raisins might have been imported from elsewhere and stored for consumption by the Harappans in Punjab. But, it is for the first time in the Indian sub-continent that the factual evidence from Rohira in the same region has given prehistorians, the substantial information about the cultivation of grapevines[11]. Besides the wood charcoals of *Capparis aphylla, Acacia* sp., *Ziziphus* sp., *Tamarix* sp., *Prosopis spicigera,* etc., grapevine charcals have also been found of common occurrence in the pre-Harappan and Harappan deposits at this site (2300-1700 B.C.). The wood charcoal remains may be looked upon as indicating the use of surrounding vegetation, as fuel. Occurrence of grapevine charcoals is of particular significance. The important point that needs looking into is that the spontaneous and sub-spontaneous forms of *Vitis vinifera* which are also called as grapes, are confined to damp forests in the sub-Himalayan regions. Therefore, the natural resources of wild grapevines to be exploited by Harappans in Sangrur District, lie at too great a distance. In all likelihood, settlers at Rohira seem to have cultivated the grapevines and made use of pruned waste-portions as fuel, along with other locally available woods.

In view of the evidence of grape seeds only, a convincing picture of grape cultivation can, however, not be constructed at Mahorana. The plant remains inevitably provide an incomplete picture. This is especially true when preservation is by carbonization. A good number of plants are unlikely to come into contact with fire and quite a few in carbonization, fail to survive in identifiable form ; resultantly the informations on the sites remain fragmentary. Differences in the food plant assemblages established between the neighbouring sites at Mahorana and Rohira, may be an artefact of the sampling methods or due to the nature of evidences. Further, the excavation work at Mahorana was on a limited scale. Rohira evidences are monumentous not only for the site, but for wide region in Punjab. Both the neighbouring sites have similar cultural, agricultural and environmental conditions. Circumstantial evidences, thus, suggest that the pre-Harappans and Harappans in this region not only consumed the grapes in the form of sweet raisins, but attained the know-how of grapevine cultivation as well.

Cultivars of *Vitis vinifera* in the Old World are thought to be derivatives of wild *V. vinifera* of Middle Asia, which is still found from north-eastern Afghanistan to the southern borders of Black and Caspian Seas. Armenia has been regarded to be the home of first grape culture. Practice of grape cultivation was under way in Western Asia as early as fourth millennium B.C.[12] From here, it diffused to the Indian sub-continent. The elaboration of the Harappan culture in the Indus Valley of Pakistan and Punjab and Rajasthan in India, is ultimately the result of West Asian contact. The introduction of Sweet raisins and the technical know-how of grapevine cultivation can not be divorced from the obvious line of development in Baluchistan and Afghanistan. The earliest evidence of the grape seed is also recorded from the pre-Indus period at Mehrgarh in Baluchistan, dating back to 3000 B.C.[13] Several kinds of grapes with seeds and without, are cultivated especially in Baluchistan, Chitral, Swat, Baltistan, Astor and Kashmir. Unfortunately, it is difficult to locate the exact source areas which the Harappans in Punjab were likely to have exploited, either directly or indirectly. Moreover, the factual evidence of grapes has not been represented in the Harappan or pre-Harappan settlements of Sind in Pakistan, which have evidently been regarded to have established their contacts and

trade with western and central Asia. The information from Rohira and Mahorana is so scanty that it allows no sequential development of the introduction of grape cultivation in Punjab, on the basis of archaeobotanical evidences alone. But all the same, evidences from Mahorana and Rohira are important and indicate on factual grounds that the grape cultivation was practiced in Punjab, during the Harappan times.

So far, the course of social evolution of Harappans in the Indian sub-continent has increasingly been shaped by modes of cultivation of cereals, pulse crops, oil seeds and the fibre crop of cotton. Hyacinth bean from Mahorana has brought to light for the first time, that they grew the green vegetables also. Cultivation of grapevines in this region suggests that the Harappans in Punjab were more stable community than that needed for the production of cereals and pulse crops. The vine cultivation entails a much longer-term investment in which profits are not resulted for a number of years after the planting and the subsequent grafting, pruning and the care of trees. How did Harappan settlers at Mahorana and Rohira grow vegetable legume and grapevines ? This aspect of questions is beyond our approach. Only historical aspect based on the factual evidences, is considered here. Though the evidences are fragmentary, they indubitably suggest that the knowledge of arbori-horticulture was highly advanced in the Harappan settlements of Punjab.

Acknowledgements

Grateful thanks are due to Professor Y.D. Sharma and Professor S.N. Chopra, Department of Ancient Indian History, Culture and Archeology, Punjab University, Chandigarh, for entrusting the material for investigation to me. Facilities provided by Dr. B.S. Venkatachala, Director, Birbal Sahni Institute of Palaeobotany, Lucknow, are also gratefully acknowledged.

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Dr. K.S. Saraswat
Birbal Sahni Institute of Palaeobotany,
Lucknow-226 007, (U.P.) INDIA

Gulrihvaghat and Lohra Dewa : Chalcolithic Settlements in District Basti, Uttar Pradesh

Birendra Pratap Singh

Explorations in districts Basti and Sidharthanagar in eastern Uttar Pradesh were conducted with a view to understand settlement pattern of the cultures of the region[1]. The explorations in the area revealed that pre NBP and early NBP settlements are less in number. Noteworthy sites in this regard are those of Gulrihvaghat and Lohra Dewa which yielded material remains comparable with those recovered from excavated sites of Khairadih[2], Narhan[3], Sohgaura[4] in districts Ballia and Gorakhpur respectively in Uttar Pradesh, Senuwar[5] in district Rohtas in southern Bihar and Koldihwa[6] in Vindhyan region. It was observed that the explored region abounds in Kushan settlements suggesting a sudden increase in the population during this cultural phase. These sites are located along the rivers and lakes but their main concentration is found near the latter. The present paper aims at discussing the pre-NBP cultural assemblage represented at Gulrihvaghat and Lohra Dewa and their comparative study with the excavated sites referred to earlier.

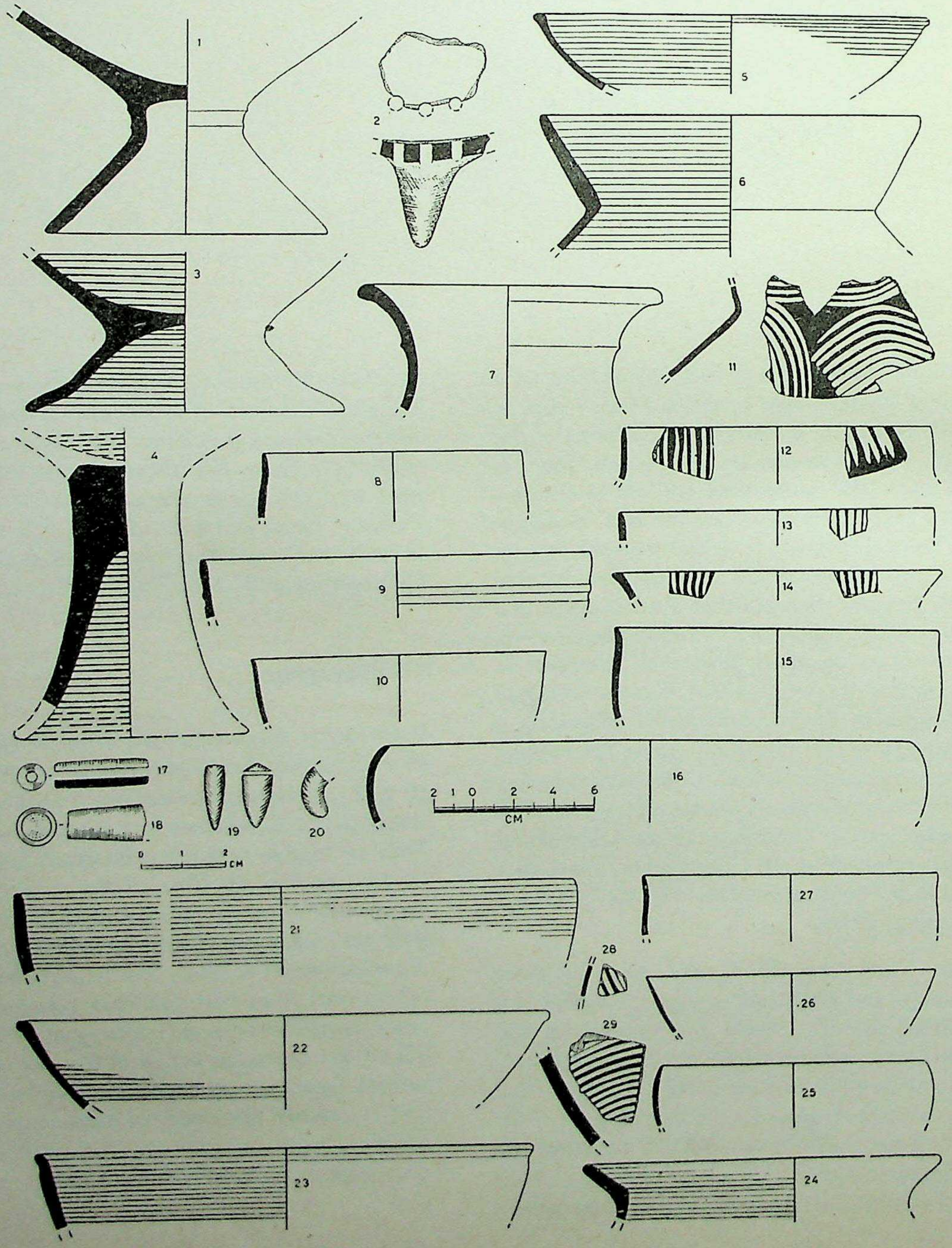
Basti has been separated into two districts Sidharthanagar and Basti and as such the former is a newly formed district. "Basti lies entirely in the submontane plain, with no natural elevation to diversify its surface. Many small streams rushing down from the lower hills or rising in Nepal Tarai water this tract, Chief among them being the *Burhi* or 'old' Rapti, the Banganga, and the Jamwar. South of the Rapti the central plateau of the district extends almost to the Ghaghra and is drained chiefly by the Kuwana, which has course parallel to the Rapti and Ghaghra. The Katnehia, Rawai and Manwar are the principal tributaries of the Kuwana. There are many natural lakes or depressions often formed in the old beds of rivers, the largest being the Bakhira, Chanda, Pathra, Chaura and Jasoia Tals."[7] A brief and general account of the results of the explorations of the two sites : Gulrihvaghat and Lohra Dewa is given here.

Gulrihvaghat

Gulrihvaghat Tendua (Lat 26° 47'10" N, Long 82° 29'30" E) and Gulrihvaghat Gobhia (Lat 26° 47'10" N, Long 82° 30'10" E) are the two sites in Haraiya tahsil of Basti district which can be approached by Faizabad-Basti main road. They are located west of the Bhadawal village. Both are situated on the left bank of the river Manwar. The distance between the two is roughly 1.5 Km. Both the sites are completely eroded by the river and hence no dimension could be taken. The nature of material culture represented from both the sites remained the same. Since the surface finds of Gulrihvaghat Tendua is rich we will be discussing the details of this site alone. Among surface finds, pottery constituted the most prominent trait. It included black and red ware, black slipped ware (plain as well as painted), red ware (slipped and unslipped) and burnished black ware.

Black and Red ware :

On the basis of fabric and surface treatment, the ware is broadly divisible into two groups viz., medium and thick. The clay employed in the manufacture is not well levigated and tempered with sand, mica, husk etc. Generally the core is gritty and porous. Sherds belonging to medium fabric are treated with slip on both sides (internally with black and externally with red slip). Mostly the pottery is weathered and hence it is not possible to suggest whether burnishing was done or not. Shapes represented in this group are straight sided bowls and basins. Pottery belonging to thick fabric is without any surface treatment. Among the important types noted in this group are pedestalled bowl, dish-on-stand, vases with flaring rim etc. (Fig. 1).



The absence of painted sherds in the ware is just a coincidence as the same has been reported in earlier exploration.[8]

Black Slipped ware :

The black slipped ware is found in fairly good number. It is also divisible into two groups *viz.*, i. sherds with fine fabric having thin section and ii. sherds with medium fabric. The former is made of well levigated clay free from any admixture. The core is usually compact and when struck it provides a metallic sound. Painted sherds occur particularly in this group. The pigment used for painting is cream or white in colour. The painting has been done in pre-firing stage. The motifs included concentric arches, group of oblique or vertical lines. In case of painted specimens the slip applied on exterior surface is made of fine paste while the interior surface is treated with inferior quality of slip. The external surface in certain cases show evidence of burnishing. Painted black slipped ware is reported from comparable horizon from a number of sites. Particular mention in this regard may be made of Khairadih, Sohgaura, Senuwar, Koldihwa, Chirand Oriup, Sonpur[9] etc.

The sherds belonging to medium fabric is comparatively inferior. The core is less compact and prorous. The pottery types include vertical sided bowls, flat based bowls, convex sided bowls, corrugated bowls and dishes. All these have analogues at Khairadih and Senuwar.

Red ware :

There are two fabrics in this ware, medium and coarse. The former is slipped on both sides and the latter is represented by thick walled vessels without any surface treatment. The pottery in general is poor. The shapes represented are perforated footed bowl, dish-on-stand, vases with vertical neck having featureless rim with long concave neck, with flared rim, pedestalled bowl etc.

Burnished Black Ware :

Quite a few sherds have been found. The clay employed in the manufacture of this ware is highly tempered and not well levigated. It is represented by thick specimens having gritty and porous core. The slip is applied on both sides of the vessels. The difference noted between the black slipped and black ware is in fabric, core, surface treatment and forms. Vase with an out turned rim having long concave neck is the type found in the ware. It is significant to note that the ware is found at Khairadih and Senuwar also.

Among associated finds mention may be made of finished and unfinished beads of semiprecious stones and stone chips.

Lohra Dewa (Lat. 26° 46′ N, Long. 82° 57′30″ E)

The site is in Khalilabad tahsil of Basti district. It is situated near a big lake which joins Katnehia river a tributary of Kuwana. The site can be approached by Basti-Gorakhpur main road. The mound is extended approximately in 1 sq. km. area having an occupational deposit ranging from 6-7 mt. The cultural assemblage as a whole betravs chalcolithic character in its earliest level. The various ceramic industries encountered from the mound proper and its close vicinity fell under the following groups : i. black and red (plain as well as painted), ii. black slipped ware (plain as well as painted). iii. slipped and unslipped red ware and iv. fine grey ware.

The pottery belonging to group (i) are found in small number. However, the study revealed that they are divisible into two categories, one which is slipped on both sides and the other without any surface treatment. The clay used in both the categories is generally well levigated without any admixture. In the former a solitary painted sherd has been found. The painting is excuted in white pigment showing linear pattern. Noteworthy shapes encountered in the ware include dish-on-stand, pedestalled bowl, basins and bowls with externally thickened or featureless rim.

The black slipped ware belonging to group (ii) is divisible into three categories viz., coarse, fine and medium. The first two are represented in small number while the last is found in majority. Both the surfaces are slipped and at times showing smoothened surface. In the medium fabric convex and straight sided bowls are the representative forms. Dish is represented mostly in coarse variety. A solitary painted sherd in fine fabric has been found.

Red ware appears to be dominent industry and divisible into three fabrics : thin, medium and thick. Two classes of pottery have been noted, one without any surface treatment and other treated with a slip or wash. Repesentative types in the ware include- straight sided bowl with everted featureless rim, deep bowl with externally thickened rim, vases with flaring rim, perforated footed bowl etc. Presence of cord impressed sherds in this ware is a noteworthy feature.

Quite a few sherds of fine grey ware with thin section have also been found. All of them are shapeless and hence nothing can be said about them.

Stone chips have also been collected from the site.

From the above description of the two sites viz., Gulrihvaghat and Lohra Dewa it is evident that the culture represented in its earliest level is characterized by the black-and-red (plain as well as painted), black slipped (plain as well as painted), burnished black and red wares. The occurrence of the above wares in the chalcolithic level at Senuwar, Chirand and Koldihwa is a clear indication that the culture represented at Gulrihvaghat and Lohra Dewa is chalcolithic in nature. Among other excavated sites which have yielded the sme class of pottery are : Khairadih, Narhan, Sohgaura in eastern Uttar Pradesh and Taradih, Chechar-Kutubpur, Oriup, Maner etc., in north Bihar. At the second site the painted black slipped ware is conspicuous by its absence, the prominent ware being the painted black-and-red ware. On the contrary the painted black slipped ware is the prominent ware at Khairadih. Both in fabric and forms the pottery of Gulrihvaghat and Lohra Dewa closely resembles with those recovered from Khairadih, Narhan, Sohgaura, Koldihwa and Senuwar and affords the greatest analogies. Common shapes encountered at Gulrihvaghat and Lohra Dewa and the excavated sites just referred to above include : pedestalled bowl, dish-on-stand, vases with flaring rim, with an out turned rim having long concave neck, deep bowls with externally thickned rim, perforated footed bowl and basins in the red and black-and-red wares and straight sided bowls, flat based bowls, convex sided and corrugated bowls, and dishes in the black slipped ware.

The black-and-red and black slipped ware which bear profusely painted surfaces in cream or white pigment internally as well as externally, and the monotonus linear motifs further show that there is a basic unity in this painted pottery group with the different regions. From a comparative study of the different fabrics and pottery-types represented at Gulrihvaghat and Lohra Dewa referred to earlier and sites excavated in eastern Uttar Pradesh, southern Bihar (Senuwar) and Vindhyan region (Koldihwa); a family-likeness is indicated linking one regional industry with the other suggesting thereby one integral culture or developments of a common pattern. At any rate one thing is certain, that the sites of Gulrihvaghat and Lohra Dewa do promise the existence of a chalcolithic stage.

Acknowledgement

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The two seasons work (1986-87 and 89-90) conducted by the author, under the auspices of the Department of Ancient Indian History, Culture and Archaeology, B.H.U., brought to light deposits four cultural periods— I, Neolithic, II, Chalcolithic, III, NBPW phase, and IV, Kushan. Period II, at Senuwar is chalcolithic. It is represented by black-and-red (plain as well as painted black slipped (plain as well as painted), burnished black (plain as well as painted) slipped and unslipped red and black painted red wares commonly known as black-on-red ware. Leaving aside the black-on-red ware which is absent in the entire region of eastern U.P. the remaining wares have close parallels in fabric, typology and other details with those found at Gulrihvaghat, Lohra Dewa and sites excavated in eastern U.P.

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Dr. Birendra Pratap Singh
Department of Ancient Indian History, Culture and Archaeology, B.H.U., Varanasi.

Pebble Tool Industries of Bundelkhand (U.P.) in Indian Perspectives

R.P. Pandey

The pebble tools mark the beginning activity of early man and the tools which early man made. These tools have been found in the lower most archaeological deposits at many sites in the world. The most important site in this regard is Olduvai Gorge, Tanzonia, Africa where a gradual developmental stage of prehistoric cultures have been unearthed. The Bed II of Olduvai Gorge has yielded the first intentionally made tools (Pebble tools) thereby indicating the production of earliest tools, in proper stratified context supported by rich faunal material. But the later researches produced some results, due to which, particularly the Pebble industry through out the world was a matter of controversy. This phenomena is also prevailed in the Stone Age industries of the Indian sub-continent. In the present paper the author discusses the evolutionary stages of the Pebble tool industries of the India in general and Bundelkhand of Uttar Pradesh in particular.

The Bundelkhand is divided in two major regions : Bundelkhand of Uttar Pradesh and Bundelkhand of Madhya Pradesh. The Bundelkhand of Uttar Pradesh is comprised of mainly four districts i.e. Banda, Jhansi, Jalaun and Hamirpur. The complete Bundelkhand is drained by Yamuna system, forming its northern edge. The main rivers of the area are Baghain, Ken, Dhasan, Sindh, Betwa and Paling. All these rivers, having northerly flow, rise in the hills of Madhya Pradesh and after covering some distances of hilly regions of Madhya Pradesh enter in Uttar Pradesh to form alluvial plains. These rivers finally meet Yamuna which form northern boundary of Bundelkhand. The main geological formations of the Bundelkhand are the Archaeans, the Bijawars, the Vindhyans, Laterites and Alluvium. The region experiences a typical monsoonal rains fall and is an average of about 1000 mm per annum and is covered by Black, Yellow and Red soils nourishing mainly scrub and thorny type of woodlands.

The Pebble Tool Industries of Bundelkhand :

The Pebble tool industries and the Acheulian industries of the Lower Palaeolithic Period co-existed in the Bundelkhand area of Uttar Pradesh. Only three Pebble tool sites on different river valleys have been discovered in the area[1]. They are Bangawan on Betwa; Lahchura on Dhasan and Belharka on ken rivers (Fig. 1). The richest site among these are Lahchura which has yielded 345 tools. Bangawan comes next in order yielding 69 specimens. The smallest collection, numbering only 5 is from Belharka. The raw material employed for this industry is mostly quarzite but Traniter Dolerite and Basalt open, Jasper Quartz have also been used. The collection comprises of Pebble tools (both Unifacial and Difacial pebble tools) (Fig. 2 and 3), including partially retouched flakes, Blades, split Pebbles and Cores. No site of this industy is found in the stratified contex. The

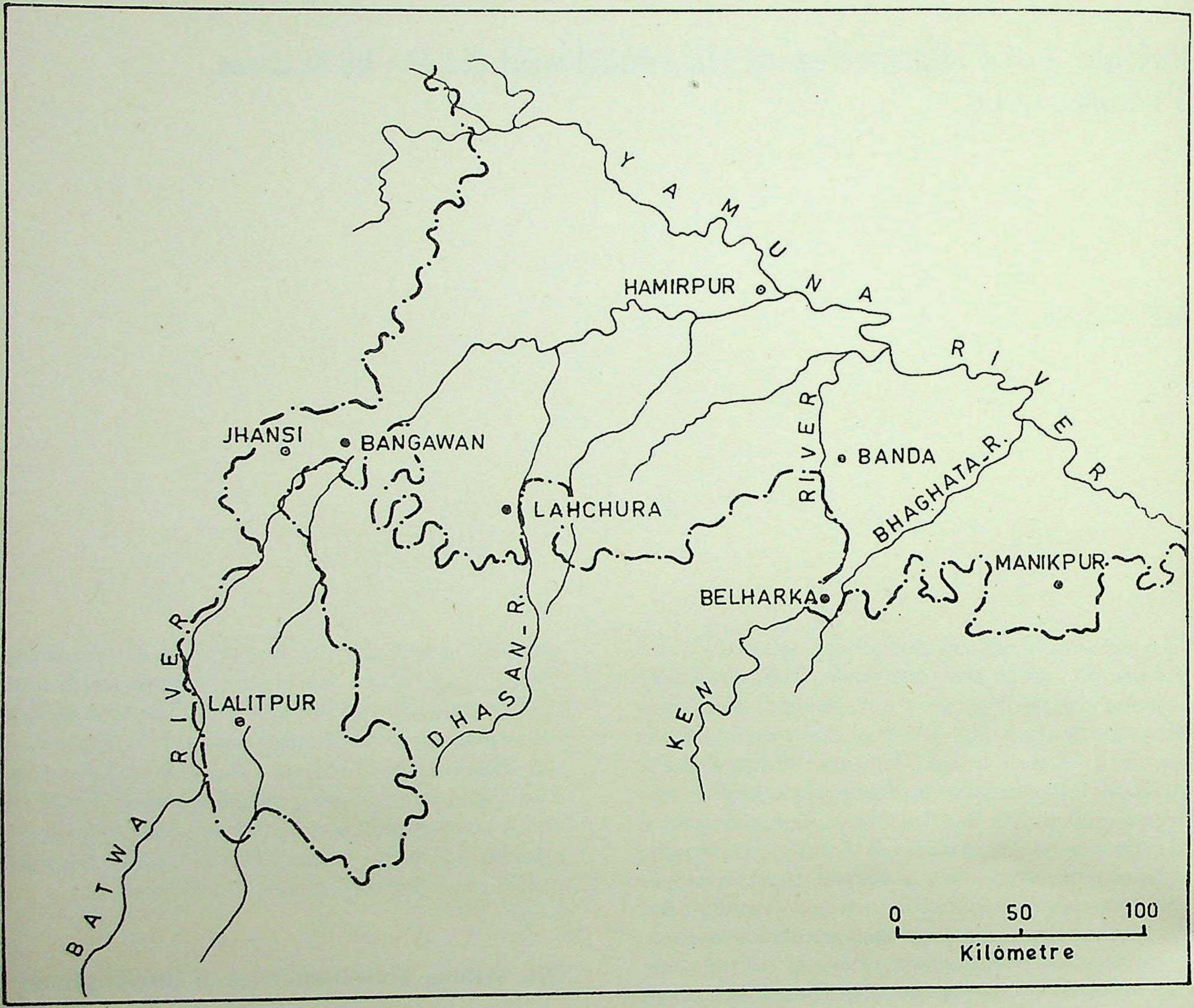


Fig. 1. Pebble Tool Industries of Bundelkhand, U.P.

sites are situated on the slope and foot of the hills, on the main rivers. Pant has given an exhaustive detail of these industries : their typological classification, statistical parameters etc.[2]

The Pebble tool industries of India :

The first Lower Pableolithic industries were discovered in two different regions by Yale Cambridge Expedition led by De Terra and Paterson[3]. The team discovered two sets of Lower Palaeolithic industries : Pebble tool industry and Acheulian industry. The Pebble-tool industry was confined in the north and was found on the terraces of Sohan in the Potwar region, was named as 'Sohanian'. The Acheulian industries were found around Madras and at Attirampakkam in the gravels of Kortalayar valley was called 'Madrasian'. Later Krishnaswami and Soundara Rajan[4] studied the Singarauli Basin Lower Palaeolithic industry and due to the presence of Pebble tools in the Acheulian industry there, put forward a theory that the area was meeting ground of the Pebble tool tradition of the north and Acheulian tradition of the south.

After the work of Yale Cambridge Expedition, the prehistory of India got an impetus. Several regions, including Himalayas were explored. The Nalagarh, Beas and Banganga areas were also taken up. These regions

LAHCHURA - I

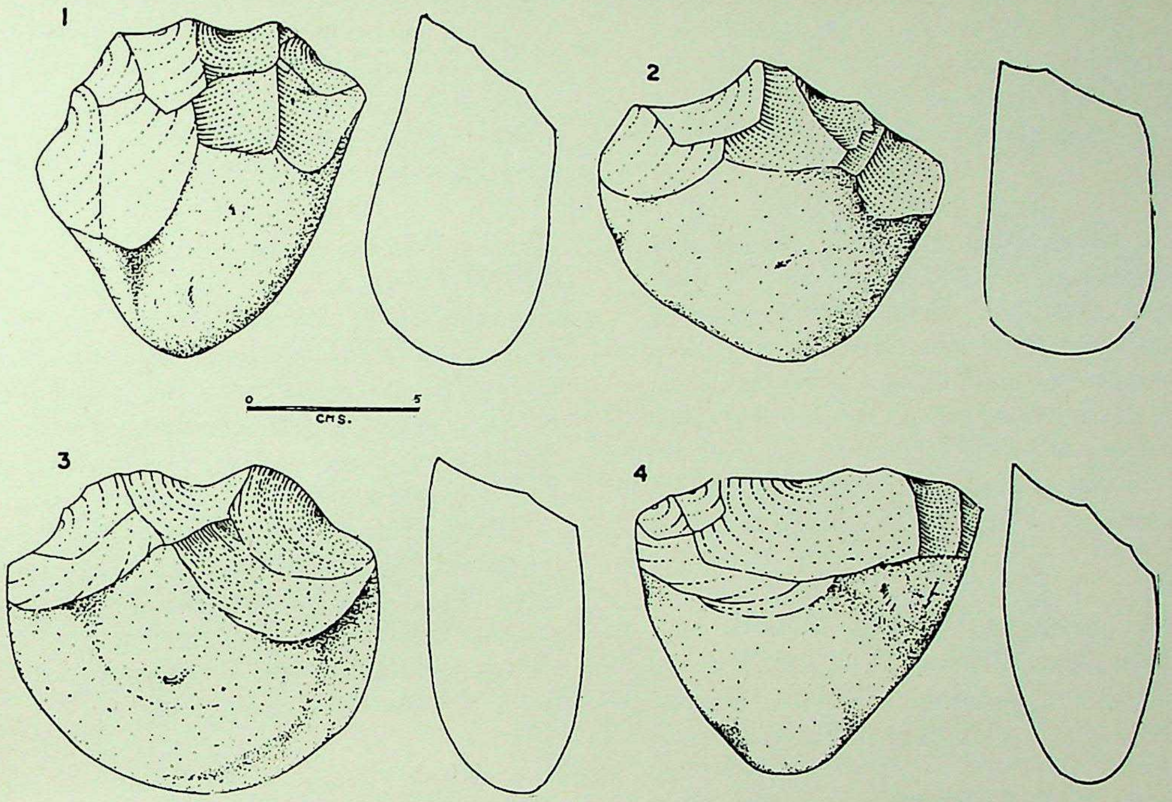


Fig. 2. After P.C. Pant 1982 (Pandey, R.P.)

BANGAWAN

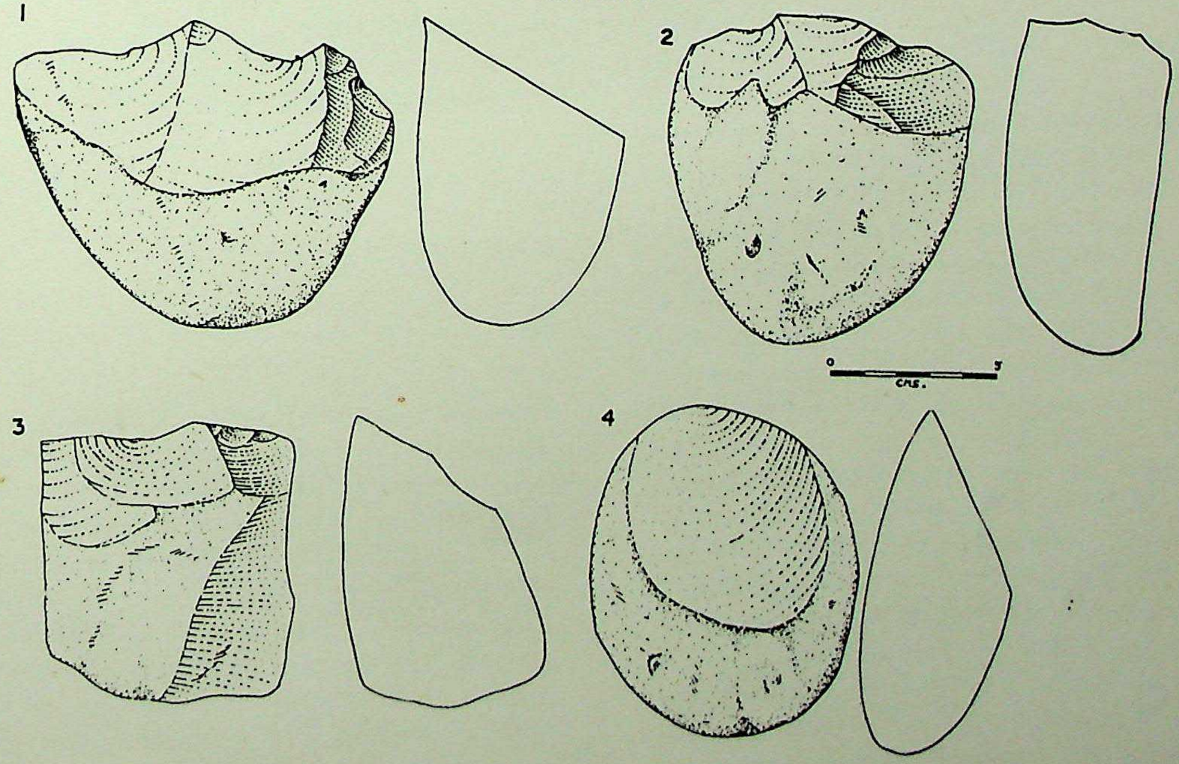


Fig. 3. After P.C. Pant 1982 (Pandey, R.P.)

also yielded Pebble tool industry[5]. In early sixtees, Khatri[6] located a rich Pebble-tool industry at Mahadeo-Piparia on Narmada and after a type site named it as Mahadevian. But the excavation conducted by Supekar at Mahadeo-Piparia did not confirm a separate Pebble tool industry[7].

The different regions of India have now been explored and have yielded varities of evidences through the ages. During Lower Palaeolithic period regional variations have been observed. There are a few regions from where only Pebble tools have been brought to light but same areas which are considered to be the areas of Acheulian tradition, pockets of Pebble tool industries have been discovered, thereby indicating no preferential areas for the settlement of particular type of tradition or cultural traits.

The different geographical regions of India have evidenced the presence of Pebble tool industry. They are Nalagarh[8], Beas and Banganga valley[9] in Himachal Pradesh; Garo Hills[10] in Meghalaya; Bhimbetka[11] and Mahanadi Valley[12] in Madhya Pradesh; Tel valley[13] in South Western Orissa; Konkan[14] in Maharashtra; Nittur[15] in Karnataka and Palghat[16] in Kerala.

Discussions

The stratigraphical position of most of the above sites is not clear. The Pebble-tools at Nittur occur along with the fossils of *Bos namadicus* but, according to the author, "the stratigarphical position is not clear"[17]. In Konkan, Maharashtra, Pebble tools at several localities, were found *insitu* but their exact stratigraphical position could not be build up as no other cultural material was traced *insitu*. In the Tel Valley[18] the Pebble tool industry has been found in the gravel deposit stratigraphically below the Middle Palaeolithic horizon/gravel and a few Acheulian tools like miniature handaxes are present in the Lower Palaeolithic collection. The Acheulian forms occur in the Middle Palaeolithic industry from the Basal gravel (Pebble conglomerate) in the Upper Mahanadi valley[19] indicating prevalence of Acheulian tradition like miniature handaxes and pebble tools (Fig. 4 & 5). The Basal gravel in the Upper Mahanadi valley have also yielded late Pleioscen animal fossils of *Equus, Bos* and *Ovis/Capra* species : It is only Bhimbetka where the Pebble tool industry has been encountered from the lower most horizon below the Acheulian strata.

It has been observed that most of the Acheulian sites in the Indian subcontinent have yielded Pebble tools and bifaces together and sometimes the Pebble tools are found as high as 40% like kurnool area of Andhra Pradesh[20], thus showing Pebble tools as an integral part of the Acheulian industry[21].

Recently students of the Deccan College Research Institute Poona S.B. Ota and Pradeep Mohanthy, discovered Pebble tools and Mesolithic industry together in Orissa. As they occur together this collection of Pebble tools and Microliths have been considered as one and has been grouped as Mesolithic industry. The Pebble tools and microliths respectively are classified as Heavy duty tools and Light duty tools[22]. The tools occur on the slope of tne hills. Some of these sites have also been excavated but the excavation on the slope of a hill do not indicate as a real deposit and the possibility is more of a washed material. The two different cultural material at a site are often encountered and are grouped separately and never have been taken as one Unit.

Five different types of landforms are recognised regarding occurrence of Pebble tool industries of India and are as under—

a) Himalayan region

b) West coast region

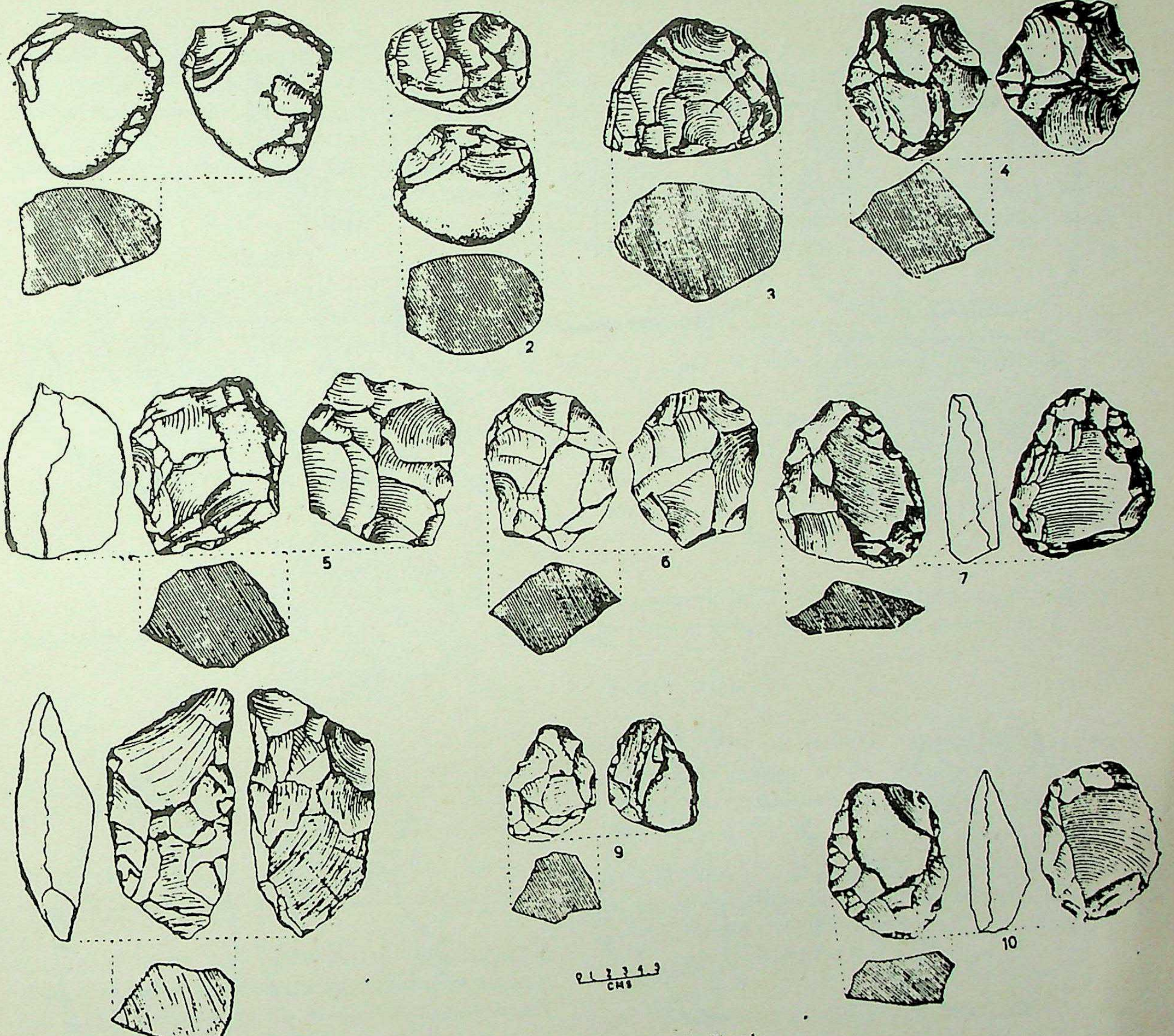
c) River gravels

d) Caves/rock shelters

e) Foot hill and hill slope areas.

Only west cost which is rich in Pebble tool industry has not evidenced Acheulian assebledges. Otherwise all the topographical Zones have yielded Acheulian elements. The Himalayas which was considered to be devoid of Acheulian cultures have recently given rich Acheulian collection from the Himalayan Frontal range[23]. The south-western Orissa has also evidenced Acheulian industries on the Brahmani Baitarni rivers[24]. Other Penisular Indian regions are also rich in Acheulian industry where pockets of Pebble tool industries are found.

In the Tel valley, South-Western Orissa[25], the Pebble tool



Lower Palaeolithic Tools

Fig. 4. Tools from Mahanadi Valley, M.P. (Pandey, R.P.)

industries come from the Basal gravel, overlain by Middle Palaeolithic gravel. In the Basal gravel miniature handaxes also occur along with the Pebble tools. In the Mahanadi valley[26], the Pebble tool industry also contain a solitary handaxe showing Acheulian elements in it. During succeeding period Acheulian forms lke miniature-handaxes and Pebble tools occur in the Middle Palaeolithic tool-kit, thereby indicating the presence of Acheulian tradition in the area. The Pebble tool industry of the Mahanadi valley techno-typologically is different than those of Middle Palaeolithic Pebble tools and exhibit a cruder workmanship. In the neighbouring Narmada and Son valleys[27] rich Acheulian sites in stratified context are present. Even the excavated Acheulian sites have produced considerable amount of Pebble tools (see Table 1). These sites are situated in Central India and also in South India and exhibit fairly good percentage of Pebble tools in Acheulian industries. Thus, earlier observation of Lal[28] that "Chopper reduces rapidly toward south and vice-versa handaxes towards north will have to be revised in the light of new evidences.

In the Bundelkhand region Pebble tool and Acheulian industries, both have been found. Pebble tools occur

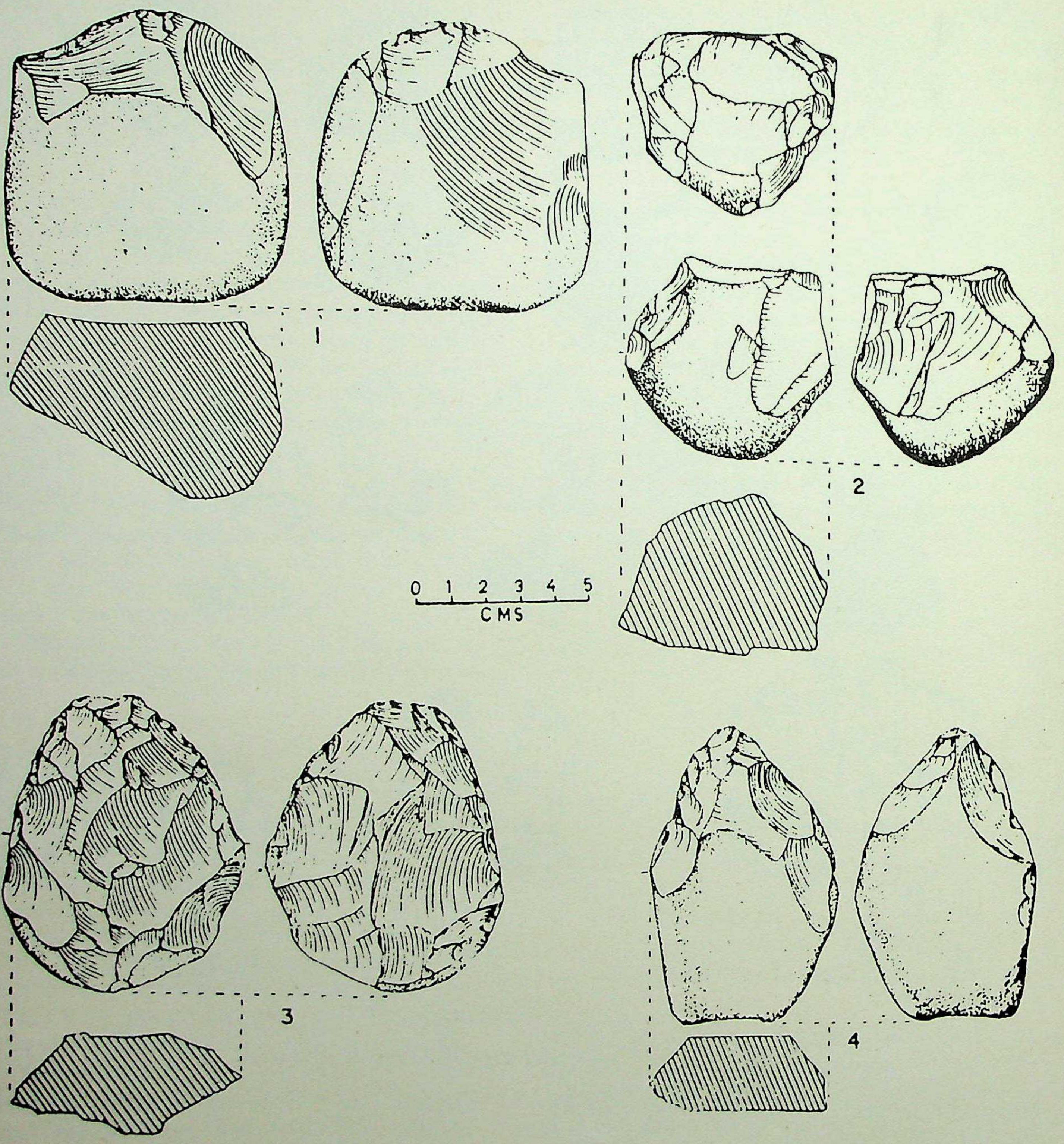


Fig. 5. M.P. Late Achenlian Tools (Pandey, R.P.)

separately and also with the Acheulian industry[29]. The Acheulian industry in this region comes from stratified context while Pebble tools occur on the slope of hills. The Pebble tools also make their presence in the Middle Palaeolithic collection and exhibit technologically advance stage and finer workmanship. Pant[30] has compared Pebble tool industry of Bundelkhand with those of Bhimbetka.

The gradual development of the cultural heritage from Pebble tool to Acheulian has not been exhibited in Indian Lower Palaeolithic industries as has been evidenced in

Europe[31] and Africa[32]. After survey of Pebble tool sites from all over India, it has been demonstrated that the Pebble tool industries in India has been unearthed stratigraphically below the Acheulian levels separately and also occur with the Acheulian industries. Pant[33] opines that "some of the Pebble tool industries of

Table 1

Site	Total finished tools	Choppers	Handaxes	Cleavers
Lalitpur	121	7.44	72.73	18.18
Mahadeo Piparia	336	49.11	5.06	4.77
Adamgarh	93	34.40	8.60	6.45
Chirki-Nevasa	1510	36.16	34.17	25.30
Anangwadi	94	35.11	28.72	13.77
Hunsgi	291	8.26	16.51	25.69

Peninsular India are contemporary with those of Acheulian industries. Joshi (Personal communication) is also of the opinion that "the Pebble tool industries and the Acheulian industries flourished together to form an important component of the Lower Palaeolithic industries of India.

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Dr. R.P. Pandey
School of Studies in Ancient Indian History,
Culture & Archaeology,
Jiwaji University, Gwalior (M.P.)

Excavations at Radhan (1989-90), District Kanpur, U.P.

Makhan Lal

The archaeological site of Radhan(26°45'N;80°8'E) is 3.5 km. east of Uttari Pura railway station and 17 km. South-east of Bilhor tahsil headquarters. From Uttari Pura railway station a metal road leads for the village.

The mound, visible even from a distance of 5 km., stands on the right bank of the Ganga and is on the southern side of the village; infact more than half of the village is located on the mound itself. The lofty and impressive mound measures 650 m. N-S and 250 m. E-W. The height of the mound varies from 10 to 15 m. Several rain gullies cut into the mound have exposed sections in various parts of the mound while on the side of Ganga entire profile can be seen. From the size of the mound the site appears more like a market or town rather than village or city.

The site was discovered by me in 1978 during the course of village to village explorations of Kanpur district. The results of explorations have been published elsewhere[1]. The cultural period as could be delineated on the basis of pottery occurances were BRW, PGW, NBPW, Red Slipped Ware to medieval period. The mound shows the remains of almost all the periods right from BRW period to the present. This is one of the rarest sites where expansion has been horizontal rather than vertical. The decision for excavations were taken because it offered an opportunity to study the archaeological deposits of different periods without much disturbance from the later period's deposits.

During the 1989-90 excavations three trenches of 5 x 5 m. were laid near Nathu Nala to assess the potentialities of the area for large scale excavations of NBPW period. The sections exposed due to the Nathu Nala showed virtually pure NBPW deposit in that area. The objective was to confirm the above observation through proper excavations.

Of the three trenches we could reach to the natural soil only in one. The total deposit in this trench was 7.40 m. divisible into 27 layers. The other two trenches could be dug only upto a depth of 3.5 m. The deposit in the trench where we reached natural soil can be divided as follows

1.	Disturbed due to modern pits and robbing of bricks etc.	= 0 – 1.5 m.
2.	NBPW deposit with structures of burnt bricks.	= 1.5 – 2.90 m.
3.	NBPW deposit without any burnt brick structure etc.	= 2.90 – 6.50 m.
4.	Fill material to level the uneven surface containing sherds of NBPW, PGW, OCP	= 6.50 – 7.40 m.

The nature of deposit clearly shows that we are virtually dealing with single culture NBPW deposit. An examination of sections in Nalas and various cuttings by the villagers shows that there is at least 3 acres of pure NBPW deposit around Nathu Nala varying 3.5 to 5.00 m. in depth. The occurance of PGW and NBPW and OCP sherds in the lower deposits can be explained by the fact that when people came to settle in that area they had use the deposit in nearby area to level the surface. The mud used for this purpose contained sherds of all these cultures which can be seen in the sections. However, it may be mentioned that this was for the first time that OCP sherds were found in Kanpur district.

During the course of excavations two structures of burnt bricks of Mauryan period bricks measuring 10x29x39 and 10x29x46 cm. were found. One structure was worn out floor of bricks with foundation wall (Pl. 1). On the floor no worth mentioning antiquities were found. The foundation wall was of 14 courses and was built on brick-bats pounded surface. The other structure was a brick wall of 15 courses (Pl. 2). It seems that partly this wall was robbed. The finds include beads of carnelian, agate, Jasper, quartz, copper and terracotta. A few rings of copper were also found. Points of bone, iron and copper were found in large number. Two highly polished circular weights of quartz and carnelian were also found. Among the iron implements the find includes two sichels, one hae, several knives, nails and fish hooks. Three triangular pieces of terracotta objects were found which have cut out of a circular disc in perfect four parts. Six copper punch-marked coins were also found.

This, of course a priliminary imformation a detail study of pottery and other objects is in progress. Also the future plan is to excavate the NBPW area on a larger scale to understand the process of material and technological development during the period of second urbanization in the Gangetic plains.

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Dr. Makhan lal
Department of History, Aligarh Muslim University, Aligarh—202 001

Ganga Valley : Twilights on Its Problems As Revealed in Archaeological Excavations

Ashoka K. Misra

This paper on the remains of early Historical urban centres in the Ganga valley, is a preliminary effort to organize into a more comprehansive framework materials on a period which has received insufficient attention and limited archaeological consideration. The second urbanisation[1] has created a significant gap of our knowledge about this period has been a systematic use of later textual evidence to explain the much earlier material remains and processes. The majority of excavators have used models of explanation described in the texts and consequently have focused only on those remains which adequately support the models. Therefore, this approach has generated data which is significantly marked by their biases. Admittedly any research will be formulated according to the explicitly or implicitly adopted hypothesis, "which guide the selection of research problems and the nature of the data to be collected"[2]. But to rely only on these models set forth by the texts in to limit oneself to a small range of explanatorly possibilities.

The upper Ganga valley comprising west of Allahabad have 37 cm. to 60 cm. rainfall, while in middle Ganga valley (Allahabad to Bhagalpur) the rainfall is 100 cm. and in lower Ganga valley (Bhagalpur to Bay of Bengal) the rainfall is 300 cm. Therefore when we move from west to east increase in rainfall was witnessed. The middle and lower Ganga basin, which were not conterminus with Āryāvarta, but mainly comprised Majjhimdesa, form a separate geomorphological unit, in which 500 metre thick alluvial deposit of middle Ganga valley may climatically play a transitional zone between upper Ganga valley and perhumid deltaic zone of Bengal.

The evidence of Koldihwa (Allahabad), Chirand (Saran) and Chechar-Kutubpur (Vaishali) shows that this region was habitated by Neolithic people contemporary to Late Harappan people of western India. The ceramic tradition (BRW, GW and RW) was rooted in these Neolithic cultures and may have continued in these Chalcolithic phases with some changes.

Although the Chalcolithic culture of this region is broadly homogenous with BRW and BSW (both plain and painted) as the main ingredient with restricted use of copper and microliths. The Uttar Pradesh have 156 BRW sites, while Bihar have 45 and West Bengal have 77 sites[3].

In upper Ganga valley, a separate horizon of BRW have been noted at Atranjikhera (60 cm. to 70 cm. deposit) sandwitched between OCP and PGW[4], while at Hastinapura, Jakhera, Ahichchhata etc. it is associated with other wares like PGW, BSW, GW and RW. The BRW of this region did not carry any ornamentation, where as on the otherhand, the people using it were so festidious as to carefully demarcate the black portion on the upper part of the exterior which marks a perfect horizontal line like BRW of Sourashtra region. Sankalia[5] and Gaur[6] have emphasised that there appears to be a

general similarity in respect of fabric between BRW of upper Ganga valley and Banas, but they do not specify the nature of the so-called similarity in fabric. At the same time, difference in shape is markebly visible between the two[7]. While it may be tempting to conclude that the technique of BRW in the region was learnt from post Harappan phase of Gujrat and the Chalcolithic culture of South-East Rajasthan, yet such and assumption has many pitfalls.

The BRW of upper Ganga valley have generally a burnished black interior and burnished chocolate exterior. The colour variation may not always be deliberate. The vessels are of fine fabric thin and well burnt[8]. In shape also bowls with convex sides having out-turned beaded rim at Atranjikhera and Hastinapura, apparently lack similar to those found at Ahar[9]. So not much can be made out of a similarity from upper Ganga valley and Banas valley in BRW, the assumption of a diffusion or borrowing between South-East Rajasthan and upper Ganga valley in Chalcolithic phase cannot be stretched too far.

In middle and lower Ganga valley, both plain and painted BRW is reported from pre-NBPW context. The unpainted BRW is reported from Kausambi (Allahabad), Rajghat and Prahladpur (Varanasi), Sonepur (Gaya) and Vaisali (Vaishali), while at Koldihwa (Allahabad), Sohgaura (Gorakhpur), Khairadih (Ballia), Chirand (Saran), Pandu Rajar Dhibi (Burdwan) and Mahishadal (Birbhum), unpainted BRW have been reported. Except for the absence of paintings this category is not different from painted BRW of Eastern Uttar Pradesh, Bihar and West Bengal. Statistically it dominates at easterly sites like Sonepur,but not at more westerly sites like Rajghat, Prahladpur and Khairadih. In comparison to South-East Rajasthan, where the BRW held a dominating position due to great utility, in the area covered by NBPW, the BRW was relegated to a subordinate position of being just an associated ceramic industry.

How this painted tradition in BRW came in East of Allahabad and was their any relationship between painted tradition of other weres of upper Ganga valley with middle Ganga valley ?

Sinha think that painted tradition in chalcolithic BRW of Chirand was due to the impact of Chalcolithic tradition of Maheshwar-Navdatoli in the Malwa region.

The link between Chirand BRW and Navdatoli BRW can not be accepted in view of the absence of more convincing evidence. Period I B of Chirand though devoid of iron and copper is camparable with pre NBPW of Chirand I B, Prahladpur I A, Rajghat I A and Kaushambi II.

Another set of assumptions of this kind can be seen in the definition of cultural sequences in the Ganjetic valley especially for the period of transition towards urban settlements. The sequences have basically been defined by the presence of two important ceramics, PGW and NBPW. Both wares have been regarded as relatively safe dating criteria, and as representatives of two different traditions-temporally and horizons-spatially. Generally, it is said that NBPW is a later were than the PGW, yet a significant overlap can be noticed at site like Sravasti[10]. This overlap has not been given much importance, for instance : "If we take spatial distribution into account a period of contemporaneity, though not essentially contact, may also be discerned for these wares"[11]. As for their spatial distribution, their primary distribution zones are supposedly different, PGW being more of a western phenomenon, where as NBPW would belong to the eastern section of the Ganga valley. PGW claims more of 'Village' tradition, whereas NBPW is associated with the development of urban settlement.

(a) The division corresponds to the geographical areas of distribution commonly ascribed to the wares, PGW = Western region (Hastinapura, Allahapur, Ahichchhata, Atranjikhera, Noh and Sravasti) and NBPW = Eastern area (Kausambi, Rajghat, Prahladpur, Vaishali and Chirand).

(b) NBPW at PGW sites is commonly looked upon a later phenomenen (corresponding to the expansion of trade, and of the Mauryan Empire) and to a different culture altogether.

(c) Nevertheless, we have the presence at 'Western' sites of both PGW and NBPW simultaneously : Allahapur I B, Ahichchhatra III, Atranjikhera III-IV, Noh IV, and Sravasti I.

(d) PGW at these sites, except for Sravasti and Atranjikhera, appears at an earlier stage than NBPW of Eastern region.

(e) PGW and NBPW are in all cases accompanied by three main associated wares : Black slipped ware (BSW), Black-and-Red ware (BRW) and Grey ware (GW). These wares (BSW, BRW &

GW) appear at the same time with PGW at Hastinapura, Allahapur, Ahichchhatra and Sravasti, or before the appearance of PGW at Atranjikhera and Noh. These wares (BSW, BRW and GW) always appear before NBPW at non PGW sites (Kausambi I-II, Rajghat I A, Prahl adpur IA, Vaishali IA, Rajgir I and Chirand IA - IB).

So during first millennium B.C. in upper Ganga valley a new trend in the ceramic industry developed in the form of PGW, along with unpainted variety of BRW, but eastern part of Northern India (East of Allahabad), both plain and painted variety of BRW is reported. Why not painted tradition in upper Ganga valley is reported, when it has a tradition of painting in Grey ware ? It is very surprising that painting tradition in Ahar BRW shows some resemblence with the painted tradition of the PGW, but it has no similarity with BRW of PGW region.

Another associated ceramic industry of the Ganga valley is BSW, have the same problem of origin and distribution like BRW. The comprative distribution of this ware shows a variation as one moves from East to West. In the course of its dispersal, other changes also seem to have occurrd as indicated below :—

(a) Statistically it can be said that BSW occupies a prominent position in eastern Uttar Pradesh and Bihar, while in Western Uttar Pradesh it has been relegated to subordinate position. One can further notice the decreasing cultural thickness of BSW from Prahladpur (3.06 metre) in East to Hastinapura, Jakhera in the west where it did not remain even a half metre.

(b) The BSW in upper Ganjetic basin is plain, while in middle and lower Ganjetic basin, it is both plain and painted, as in the case with BRW.

(c) Unpainted BSW of medium to course fabric is reported in middle and lower Ganjetic basin, but in upper Ganjetic basin it is generally of a finer fabric. Furthermore on the Western sites, it has a far lower frequency than on the eastern sites.

(d) Corrugation is frequent in BSW of middle and lower Ganjetic basin, but is not so in upper Ganjetic basin, although it was represented in the contemporary PGW in the Western region.

(e) In regard to typology, the BSW of Eastern region has for more veriety than the Western region and shapes like *lota* and vases which are represented on eastern sites are absent on the western sites. However, some of these shapes are represented in PGW of the Western region.

(f) The painting tradition in BSW of Eastern India is akin to the PGW, although the range of design is much smaller as compared to the PGW.

So it is possible to conclude here that in Western part of northern India i.e., Punjab, Haryana and Western Uttar Pradesh, the ceramic industry around First millennium B.C. marks a break from the preceding traditions and evidence for continuity cannot be assumed from data available so far. However, in eastern region, there is a possibility of continuity from the preceding chalcolithic tradition. For,therefore, the Eastern and Western tradition show unmistakable evidence of mutual borrowing.

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Dr. Ashoka K. Mishra
Department of History, Culture and Archaeology,
Avadh University, Faizabad.

The Ṣaḍaṅga Canons of Painting

P.K. Agrawala

In the early second decade of the present century, A.N. Tagore made a signal rediscovery of the now well-known Sadanga theory of Indian Painting in a Sanskrit couplet cited by the commentator *Yaśodhara* on *Vātsyāyana's Kāmasūtra* (I.3.15). Tagore's contribution started a new line of investigation and many pioneering attempts were made by a host of scholars calling attention to many an available document on India's own classical criticism of painting in its age-old tradition. Even earlier to Tagore, a German scholar B. Laufer had brought out in 1913 an exhaustive translation of a painting text from its Tibetan version of which the Sanskrit original is not traceable[1]. In view of the studies by Laufer, Tagore, Gopinath Rao, Coomaraswamy, Stella Kramrisch, V. Raghavan, C. Sivaramamurti, V.S. Agrawala, Moti Chandra and several others, we have now before us a staggering amount of historical material on Indian painting-aesthetics and technique which is indeed so varied and distributed over a period of many a century. There have appeared several compact studies by competent scholars, but owing to some peculiar chance there seems to prevail a lack of chronological perspective in most of the studies discussing the available documentary evidence on painting techniques and theory. To take an example, there has been no specific attempt to explore the beginnings and subsequent formulations even of the most important theory of Sadanga on Six Limbs of painting.

However, at the present showing, neither the particular verse not the Sadanga Theory itself defined as such in similar words is directly traceable to any work other than that of *Yasodhara's* commentary. But there is no doubt that *Yasodhara* himself was not the author of his extraordinary verse or the theory contained in it, and the manner in which he cites the verse to explain the word *alekhyam* in the list of Sixtyfour Arts given by Vatsyayana goes peremptorily to indicate that he is quoting an older *Sastric* authority on the subject preceding his times most probably by several centuries. Thus, a historical probe into the Sadanga theory as codified in the following passage of the eleventh century is worthy of our close attention :

Ālekhyam iti—
rūpabhedāḥ pramāṇāni bhāvaḥ lāvaṇya-yojanam /
sādṛśyaṃ varṇikā-bhaṅga iti citraṃ ṣaḍaṅgakam //
etāni parānurāga-jananāny ātmavinodārthāni ca. [I.3.15(4)]

"Painting *(ālekhya)*. Thus it is that "painting is six-limbed *(ṣaḍaṅgaka)*—(the 'limbs') which are the Rūpa-bhedas, Pramāṇas, Bhāva, Lāvaṇya-yojana, Sādṛśya and Varṇikā-bhaṅga." These (six constituents of Painting) are to inspire "attachment" *(anurāga)* of others and for the purpose of one's diversion *(vinoda)*."

A historical survey of the Ṣaḍaṅga doctrine and its constituent principles in the light of the literary evidence

available no doubt presupposes the continued specialised efforts in the fields of Indian art-aesthetics more or less independent of the study of Poetics and Rhetorics. Moreover, to cite O.C. Gangoly, "In the 'Six Limbs of Painting' we have, for the first time, direct information as to the ideas held by old Indian Painters on the theory of art and it demonstrates the existence of a section of *Silpasastras* in which the theories as distinguished from the rules or practices of artists found a place."[2]

O.C. Gangoly remarked further, "A considerable significance attaches to the time when this conception of the painter's ideal was summarised in India; ...... While it may be conceded that long before the time of *Yasodhara,* the verse must have been well known and current amongst authors and art critics—it is impossible to suggest that it is as old as the time of Vatsyayana whose date is still a matter controversy. So far as our present knowledge of the history of Indian Painting goes—it covers a period of brilliant activity at least in the period between the 2nd century and 6th century A.D. And it may be reasonable to suppose that the Indian artists must have formulated their conceptions of the ideals of painting some time between these dates. And it may not be hazardous to assert that this statement of the 'theory of painting' may have been made 4th or 5th century A.D. This brings us very near to the date of Hsieh Ho the Chinese author of the six canons of Painting."[3]

With respect to the antiquity and the period of general recognition of the theoritical principles included in the Sadanga the following observations made by Coomaraswamy are of similar interest, "Yasodhara's commentary on the Kamasutra refers to the Sadanga, the Six Limbs of Canons of Painting, viz. *Rupa-bheda, Pramanam, Bhava, Lavanya-yojanam, Sadrsya, and Varnika-bhanga.* It is impossible to accept Tagore's subjective interpretation of these terms; they can be far better understood in a purely practical sense as Distinction of Types, Ideal Proportion, Expression of Mood (with reference to the theory of *rasa*), Embodiment of Charm, Points of View (with reference to stance, *sthanam*) and Preparation of Colours (grinding, levigation. & c.). Thus understood, moreover, these subdivisions of the art are just those which the technical treatises, *Visnudharmottaram* and *Silparatna* treat of at greater length, and they might be inserted in such works as paragraph headings. There cannot be traced here any parallel to the Chinese Six Canons of Hsieh Ho; a likeness to Chinese ideas can be much more probably recognised in connection with what is said about *cetana,* the movement of life, in the *Visnudharmottaram.*"[4]

Prof. Kramrisch also appears to support this view that all of the categories of the Ṣaḍaṅga "are dealt with by the *Vishṇudharmottara.*"[5] However, Sivaramamurti publishing recently a detailed study of the Viṣṇudharmottara section on Painting has left untouched this vital aspect of the history of Indian painting aesthetics in general and the contribution of the Citrasūtra to subsequent theoritical development in this direction in particular although he will be found to see the influence of the Citrasūtra texts rather ubiquitously present both in theory and practice of the Gupta and late Indian painter.

However, only a glance over the topics dealt with by nine chapters of the Citrasūtra as well as the headings given in the colophons preserved in certain manuscripts to these chapters amply reveals the fact that of the so-called Ṣaḍaṅga principles are to be found here treated in different details although not exactly in a manner as would be expected if they were to make a collective framework for the full-fledged definition of painting. To bring out the point in clearer details the following comparisons may be noted :

Chs. 35 to 39 treat the topics of canonical proportions that came to be roughly epitomised by the word Pramāṇa

Ch. 35 styled as	Āyamocchrāya-māna-varnama-
Ch. 36	Pramāṇa-varṇana-
Ch. 37	Samānya-māna-varṇana-
Ch. 38	Pratimā-laksana-varṇana-
Ch. 39	Kṣayavṛddhi-

Chs. 40 to 41 treat the topics of preparation and application of colour that came to be roughly epitomised by the word Varṇikā-bhaṅga

Ch. 40	Raṅga-vayatikara-
Ch. 41	Raṅga-vartanā-

Ch. 42 treats the topics of form or theme and versimilitude that came to be epitomised by the words Rūpa-bheda and Sādṛśya, respectively

Ch. 42	Rūpa-niramāṇa-

Ch. 43 treats the topic of aesthetic sentiment that can be

opitomised by the word Bhāva.

The remaining principle of Lāvaṇya or gracefulnes can be found exemplified at several places in the above chapters where one is ordained to avoid certain sorts of expressions in painting, and to achieve such aspects of expression which stand for elegance.

From the above observations it would be most reasonable to conclude that the collective doctrine of the Ṣaḍaṅga essentials of painting can hardly be presumed to have existed before the date of the Citrasūtra text available now. On the other hand, the contents of the present Citrasūtra expressly indicate the specific stage of history in Indian art-aesthetic evolution which had fully prepared the fertile ground for the emergence of a full fledged theory of six essential laws of painting. This, however, does not preclude the earlier currency of such principles before their grouping to make a compact theory, and one is rather guided to be sure that each of these principles should have had a long life in the traditional aesthetic thinking prior to the time of their grouping for any synthesised theoritical specification. We are of the belief that it was immediately following the date of the Citrasūtra that the Ṣaḍaṅga combination emerged to proper specification and thoroughly *critical* appraisal at the hand of Indian art-aestheticians; the *Silpa* text or texts that may be believed to have been devoted to it properly are, however, lost at present and the unique couplet cited by *Yaśodhara* evidently belonged to such a canonical source.

There are specific literary evidences which go to conclusively show that the Citrasūtra was widely known during the *eithth* century already as a work of great authority. Sivaramamurti on the basis of his critical comparison of the iconographic material of the Purāṇa with the flourishing image-types and iconic principles as known from the late Kuṣāṇa and the Gupta period, has now advocated a date for its compilation in the fourth century. It is further enlightening to find that the Viṣṇudharmottara mentions only a *64 pada* division of the temple groundplan whereas the Bṛhatsamhitā enumerates the groundplan division based both on 64 and 81 units. Thus we are led to the view that the former is earlier than the date of the latter work, the date of Varahamihira and his work being almost fixed 504 A.D from the evidence recorded by Alberuni. In this light the earliest occasion for the full-fledged emergence and condification of the Sadanga theory is postulated by us to be somewhere during the fifth-sixth cent. A.D.

The organic concept underlying the theory of Sadanga essentially demands that all the six components must form as it were one live combination to make painting complete in its all essential details. We know of several such organic theories current in ancient India with respect to similar definitions of Yoga, Rajya (State), Ayurveda (Medicine), Jyotish (Astronomy) and Army. Thus in the Painting Sadanga the inherent ideology of an organism *(agnin)* and its constituent "limbs" *(angas)* must have been well understood, and should not, howeve, be considered by us as mere accidential or superficial in its deep-rooted traditional import. On the analogy of the human body the relative importance of any of the six limbs of painting may be treated as superior or inferior to others in the group but that all are indispensable to form the well-integrated natural body and share the same common 'life' of a painting is hardly debatable.

As discussed by Sivaramamurti, the Citralakṣaṇa text appears in its several passages largely indebted to the Viṣṇudharmottara, and as it is mentioned by the Bṛhatsaṃhitā commentator Utpala (966 A.D.) it should reasonably be placed before Utpala and after the Purāṇa. From its general contents and the intrinsic association of it with the other three texts on iconography included in the Tanjur this work can be safely placed about the 7th-8th cent. Moreover, we feel that the three extant chapters incorporated under the name Citralakṣaṇa in the Tibetan collection are to be taken to represent only a fragment of the original work, which must have treated many more themes in fuller details in its remaining part as such of them we find proposed by *Viśvakarmā* for instruction to the king Nagnajit in the concluding portion of the first chapter of the available version. It is of relevant interest here that most of the topics mentioned by *Viśvakarmā* in the introduction can be tabulated well along with the Ṣaḍaṅga principles, as has been shown by us in our work on the subject of Sadaṅga[6].

Likewise, there can be vouched a suitable representation of the Six Principles of painting in the painting chapters of the Samarāṅgaṅasūtradhāra (first half of the 11th cent.) and the Mānasollāsa (first half of the 12th cent.) as follows

Sadaṅga	Samarāṅganasūtra-dhāra	Mānasollāsa (III. ch. 1)
Rūpabhedah	Ch. 76 Pratimā-laksana	Verses 688-905

	Ch. 77 Devādirūpa-praharaṇa-saṃyoga-laksana	
Pramāṇāni	Ch. 74 Aṇḍaka-pramāṇa	Verses 179-687
	75 Mānotpatti	
	79 Ṛajvāgatādi-sthāna-lakṣaṇa	
	80 Vaiṣṇavadi-sthānaka-lakṣaṇa	
	81 Panca-puruṣa-strī-lakṣaṇa	
Bhavah	Ch. 82 Rasa-dṛṣṭi-lakṣaṇa	Verses 902-903
	83 Ptākādi-catuṣ-ṣaṣṭi-hasta-lakṣaṇa	
Lāvaṇya-yojana	Ch. 78 Doṣa-guṇa-nirūpaṇa	
Sādṛśyam	Ch. 81 Pañca-puruṣa-strī-lakṣaṇa	Verses 900-901
Varṇikā-bhaṇgaḥ	Ch. 71 Citroddesa 72 Bhūmibandha 73 Lepya-karmā-dika.	Verses 132-178

From the above comparisons one is evidently led to the belief that all of the leading texts available on painting have placed exceptional stress on the knowledge of Pramāṇa in painting. Next in importance in view of the textual attention given is the technique proper, including the preparation of colour, brush, ground, etc. and their practical application—this is in fine what is implied by the principle of Varṇikābhaṅga. Of the rest, the two principles of Lāvaṇyayojanā and Sādṛśya are, however, found to have been given in the above painting treatises no direct or specific treatment and were most probably regarded by the tradition to be the part of the general aesthetic understanding.

Let us now turn to some other illuminating evidence contained in the works of certain early poets and dramatists. In the drama Dūtavākya of Bhasa, we find Duryodhana engaging himself in looking at a cloth-painting and making the following comments in appreciation of art : "Ah, what richness is of colours *(aho asya varṇāḍhyatā)* ! How well is the presentation of the sentiments *(aho bhhāvo-papannatā)* ! How accomplished is the painting work *(aho yuktalekhatā)* ! This *paṭa*-painting is drwan very explicity (in its formal details). I am leased." As for the first common impression at seeing the picture both Duryodhana and Kṛṣṇa are made to say : *Aho darśanīyoyam citrapatah* "Ah, this painting is worth seeing"

The above remarks may be analysed in the following manner with respect to the Ṣaḍaṅga principles :

1. *Suvyaktatā of lekhana* i.e. Calarity of formal and figural work — Rūpabhedāḥ
2. *Yukta-lekhatā* i.e. Propriety of painting work — Pramānāni
3. *Bhāvopapannatā* i.e. Expressive-ness of sentiments — Bhāvaḥ
4. *Darśanīyaḥ* i.e. Beautiful to look at — Lāvaṇya-yojanam
5. (The description given in detail of characters, which are expressly identified by the viewer) — Sādṛṣyam
6. *Varṇāḍhyatā* (and *lekhana* as in 1-2 above) i.e. Richness of colours and brush work. — Varṇikā-bhaṅgah.

The above text of Bhasa is perhaps the first of its kind preserved now which can be said to refer in its select phraseology more or less to the same set of principles of painting aesthetics that are included in the Ṣaḍaṅga canons. The date of Bhāsa is somewhat debatable by scholars but this much is certain that he flourished much before Kālidāsa and cannot be, however, placed later than the 2nd-3rd century A.D.

An example of a similar, though shorter, list of principles employed to describe the merits of sculptural art will be found in Bhāsa's Pratimā-nāṭaka where Bharata is seen commenting on the images of his departed ancestors in the following manner :

1. *Aho kriyā-mādhuryaṃ pāṣāṇānām.* "O, what sweetness is there in the workmanship of these stones !" Cp. Varṇikābhaṅgaḥ.

2. *Aho bhāvagatir ākṛtinām.* "O, what flow of the sentiments !" Cp. Bhāvah.

3. The fact that he has not recognised as yet the identity of his anscestors in the figures but only appreciating the artistic excellence is further revealing on the aspect of *Sādṛśya* in art even that of portraiture. As he remarks, "These images although intended for the divinity appear to bear the similitude of human portraiture."

In the Divyāvadāna (2nd-3rd cent. A.D.), we have an interesting legend in which Māra, at the request of monk Upgupta, assumes the bodily form of the Buddha, which is likened to a valuable cloth-painting and described in the text in so many select words of aesthetic and devotional import. The following expressions will be found to refer, for example, to the Ṣaḍaṅga principles :

1. The Buddha's form : *bauddhaṃ rūpam; bhagavataḥ rūpam* — *Rūpabhedāḥ*

2. That Rūpa is stated to be *uttama-lakṣaṇādhyam*, endowed with all excelling lineaments and signs — Pramāṇāni

3. (i) What beauty of the Lord's image ! *(aho rūpaśobhā bhagavataḥ)*.
   (ii) *nayana-kāntim ākṛtim*, a form delighting the eyes. — Lāvaṇyayojanam

4. *Nayana-śantikaraṃ narāṇām*, giving peace to the eyes of men. — Bhāvaḥ

5. *Buddha-saṃjñā; sugata-samjñā; amara-saṃjñā;* Buddha's identity; the lord's identity; divine idęntity. — Sādṛśyaṃ

   "In its mouth the image excels a lotus, in the eyes a blue lily, in the bodily beauty a dense flower-garden, in delightfulness the respendent moon, in profoundity the ocean, in firmness the mount Meru, in refugence the sun, in gait a lion, in looks a bull and in complexion the gold."

6. *Pratyagra-raṅgam iva citrapaṭaṃ mahārham*, like a costly cloth-painting done in bright colours. — Varṇikābhaṅga

In his *Śakuntalam Kālidasa* (c. 350-450 A.D.) has also devised a beautiful occasion in which a painting of the heroine drawn by the love-lorn king to console his longings in separation from her is made an item of dramatic interest and certain appropriate comments of aesthetic nature made by the king himself, his court-jester and the nymph Sānumatī are of specific value here as making a suitable study in comparison to the Ṣaḍaṅga principles. The painting appears to have been viewed and appreciated in the text with respect to the Six Canons as follows:

1. The forms represented distinctively in the picture are described in detail. — Rūpabhedāḥ

2. and 3. *Madhurāvasthāna-darśanīyaḥ bhāvānupraveśaḥ,* "Due to the tender stance *(avasthāna)* is rendered beautiful: the presentation of the sentiment; *(bhāva)* — Pramāṇāni and Bhāvaḥ

4. (i) *Aho rūpam ālekhyasya* "Ah, what beauty of the painting". — Lāvaṇayojanam

   (ii) "Whatever has not been found appropriate in a picture (by the painter at work) is made (and remade) differently by him (to be finally up to the mark). Even then her beautifulness is only somewhat partially contained by the line here (drawn by me)."

5. (i) *Jāne sakhy agrato me vartate.* "I find as if my friend is herself before me." — Sādṛśyam

   (ii) *Skhalatīva me dṛṣṭir nimnonnata-pradeśeṣu.* "My eye as if stumbles over the low and high passages (in the painting)."

   (iii) The life-like figure of a bee in the picture; etc.

6. (i) *Eṣa rājarṣer nipuṇatā.* "Ah, such is the king's skill." — Varṇikā-bhaṅgaḥ

(ii) *Yad yatsādhu na citre syāt*
kriyate tat tadanyatrā etc.

In the works of Kālidāsa (c. 350-450 A.D.) and Bāna (early 7th cent.) there are in fact numerous passages which appear to shed veritable light on the technical as well as aesthetic aspects of painting art during the period under which the Ṣaḍaṅga theory was presumably formulated in its final shape. The Citrasūtra of the Viṣṇudharmottara belongs to the same age and provides no doubt the most useful commentary on some of the painting principles which came to be listed together to define an aesthetic theory so perfect as that of the Saḍaṅga.[6]

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Dr. P.K. Agrawala
Department of Ancient Indian History, Culture and Arch., Banaras Hindu University, Varanasi.

The Realm of Erotic Subjects

S.C. Kala

Erotic subjects in art and antiquities have baffled scholars all over the world during the past 100 years. In India the focus had been primarily on the erotic sculptures depicted on the outer walls of temples at Khajuraho, Modhera, Bhuwaneshwar, Konark, Puri etc. The immediate impression by looking at the scenes is violative. One cannot make out whether it was mere perverson of the sculptors or a mystic direction from the invisible faith. We have of course some information about tantricism in Orissa. This state has temple of Vārāhī at village Chaurasi where eight stages of love-making have been depicted in stone penels.

Pramod Chandra, Professor of South Asian and Indian art at the Harvard University, opines that the sexual scenes owe their origin to the Kaula Kāpālika cult[1], Viidya Dahejia also agrees with his view point[2]. One scholar suggests that the temples were erected by wealthy people who desired to see open sexual practices to satisfy their lust[3]. Another scholar feels that the erotic subjects reflect the amorous activities of the temple dancers[4]. A far fetchad theory is that the representation of the sexual subjects was permitted to attract evil spirits who dared to make inroads in the sanctioms. All these views have been expressed in the context of the temples, built after the 9th Century A.D. The problem, however, remains elusive.

Recent finds have opened new vestas in the study of such types. Sexual scenes have been noticed on certain terracotta plaques, datable to the 5th-6th millennium B.C. found at sites such as, Tepe Hermal, Susa and Tepe Gawra in Mesopotamia.

Since the woman is a close partner in such subjects it is imperative to discuss her role during the course of centuries. It is a recognized fact that the palaeolithic age-man believed in magic, witcheraft and rituals. His basic religion is unknown but he was fully aware of the female principle. It is manifest in several female figurines carved in bone, ivory and stone exhumed from the rock shelters of the Cave-man. In all the specimens there is evident a distinct stress on attributes of the eternal and potential mother.

A relief carved on the rock shelter of Laussel, Durdgone in France shows a scene of child birth or copulation[5]. It is the earliest known example of it's kind in the palaeolithic art. The child-birth with greater clarity is represented by a metal female figure from Luristan on the Western border of Persia[6]. This specimen is datable to the 4th millennium B.C. Of the same period is a clay female figure in child-birth position from Catal Huyak a site in Anatolia. A headless white marble figure in child birth position was found in a sacred pit exposed at Anya[8]. Related to this subject is a jar in the form of a nude female figure assignable to the 4th millennium B.C. from Susa[9].

There are dozens of female types with attributes like bulky hips, prominent breasts and marked vulva at some sites of USSR and the Middle East. In some examples the public region is indicated by a triangle filled with tiny dots or by a patch of r' ' or black colour. The types relate to maternity cults.

Sexual scenes are also noticeable on certain seal-impressions of Mesopotamia. A seal-impression from Tepe Gawra shows a man having sexual union with a female in front of him.[10] A thick terracotta plaque again from the site of Tell Hermal contains an interesting ritual rite. In the field a woman is holding the phallus of the man walking behind her. He holds and swings a jar in his lifted left hand (Pl. 1-3, 5).

In another plaque a man is seen inserting his phallus in the womb of a bent woman walking ahead of him. The woman holds a pipe in her hands and is sucking sacred water from a jar placed on the ground (Pl. 3, 5)[11]. On an seal impression is depicted a female in the company of two copulating snakes.[12] Yet in another impression a couple is shown in the sexual act and a snake watching it.[13]

The couples in sex act are also seen on certain terrocotta plaques. Inside a bordered frame from Susa is depicted a nude and amorous couple facing each other. The man on the left, places one hand on the abdomen of the women, the latter holds a breast with her right hand (Pl. 4)[14]. A sensational news about the discovery of engraved explicit sex/erotic scenes on the rocks of a hill side in XIWJIANG in China was released to the press in March 1989 by the Chinese news agency XINHUA. According to an eminent Archaeologist, the scenes which cover a nine metre high and fourteen metre wide expanse of stone appear to be the work of nomadic tribes living in the region 2000 years ago. The participants of sexual art are men, women and animals like tigers and monkeys. Such subjects have not been in scene in China before.

The few erotic objects described above unfold a mystic world and also reveal the flow of human mind towards the reproductive aspects and glorification of a supreme mother and also a life long call of the woman to the man. A Babylonian text clearly refers to a high priestess permitting intercourse with the anum. The concept had a universal appeal from the most remote eras of antiquity.

Let us now examine some erotic subjects in the medium of Indian terracotta art. One of the earliest nude female figurine without head was found inside a clay casket at Inamgaon, a rich site near Poona datable to the 1300 B.C.[15] A new type of nude female in child birth-position emerged in India during the 2nd-3rd century A.D. In such examples the legs of the female are stretched to the sides, the head being replaced by a lotus flower. This type was first noticed at Bhita in Allahabad district in the year 1911[16]. Subsequently such figurines were noticed at Kaushambi (Pl. 6), Jhusi, Ter in Maharashtra and Sanatti in Karnataka (Pl. 7). She has been identified as Lajja Gaurī, Aditi uttanpada and Laksmī but these views are only speculative. I have already discussed this type (assignable to the 5th-6th millenium B.C.) from the Middle East. There is a group of ringstones found at Taxila, Mathura, Kaushambi, Rajghat and Patna, assignable to the 3rd century B.C. Some of these contain nude female figures[17]. A gold plaque containing a nude female figure was also found at Lauriya Nandangarh[18]. It is datable to the early Suṅga period.

Sexual scenes are seen in some terracotta plaques of Chandraketugarh[19] and Kaushambi[20]. One example is available from Mathura and the other from an unknown site is housed in the National Museum at Delhi. All these specimens belong to the 1st-2nd century B.C.

On a plaque from Chandraketugarh is seen an unusual scene. Here a woman seated on the lap of her partner is enjoying sex. On the couples right side there stands a female attendant swinging a flywhisk and on the left a female in dance posture. The scene is orgiastic and is being performed in a joyful atmosphere (Pl. 8).

A suṅga period oval plaque from Tamluk shows a woman seated with raised knees and in child-birth position. She is probably inserting an arrow or a feather in her womb (Pl. 9). The significance of this subject is not clear. In this context I may refer to a terracotta plaque of 5th millennium B.C. from Mesopotamia. Here a erect phalli is set up on the ground and a seated woman from above is inserting it is her womb. There is no male figure and the phalli is a detached one and resembles a liṅga (Pl. 10).

An unpublished weatherworn terracotta plaque datable to the early Sunga period, probably hailing from some site of West Bengal also shows a copulating couple seated on a bedsted placed inside a pavillion with a arched door on the right side. The woman lifts her right leg, the left one is bent towards the left side to expose vulva for a smooth

act. A bulged bodies jar is also seen below the bedsted (Pl. 12). A late Sunga period plaque from Mathura (available in two fragments) shows a couple in intimate embrace. The woman on the right holds the phallus of her partner who is standing to her left side. The man has flung his left hand behind her neck and is touching her lips (Pl. 11).

A rare Śunga plaque from Kaushambi showing a couple in copulation is in the collection of the late Shri J.C. Tandon (Pl. 13). In the field of the plaque there stands a well built and affulent personage. He puts on a beaded torque, bracelets and a thick waistband wound up on the right side in a knot with pearl chains hanging from it. He is holding in his hands a woman with her body and head lowered towards the ground. The man thrusts his phallus in the vulva of the woman who takes the act easy.

As pointed earlier, Orissa had a ṣtrong tantric tradition. Tamluk in West Bengal which yielded a sizeable number of erotic plaques was also a Śākta pīṭha. In U.P., Kaushambi and Mathura have the credit of offering plaques depicting sexual scenes though these places are not connected with the Śākta tradition.

For want of space the topic of this paper could not be elaborated. It can be suggested that the generative principle had been a continuous process and was highlighted variously from the dawn of the civilization.

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Dr. S.C. Kala
Former Director, Allahabad Museum.
63E, Stanley Road, Allahabad (U.P.)

Terracottas as Source of History and Art

R.C. Sharma

Importance :

For its malleability, easy availability and inexpensive nature, clay has been a popular medium of art expression in India from times immemorial. The archaeological evidence prove that before any other medium viz., stone, metal, wood, leather, cloth, paper, ivory, etc. the earth preceded and manifested itself in different forms shapes and sizes. It is due to its ductile and soft nature.

On the other hand the terracottas also furnish a valuable data for the reconstruction of early history, to peep into the material culture of a particular age, popular life, mind, moods and modes of the society. Aesthetically their role has been vital to capture the tastes and expressions of peasants and citizens alike.

The clay figurines supply an important and continuous record from the pre-Indus period to the present day. Probably no other source of history and art has been so prolific and dominating as this modest medium.

Formation :

Technically, baked clay figures are known as terracottas The word being derived from French means the figure of clay. For proper appreciation of this art we cannot ignore the unbaked figures ornamental bricks and decorated utensils. The basic factor behind creation of these items remain the earth and the artistic urge of the potter. After removing all impurities of clay the desired figure is shaped by hands, or wheel or mould. At the stage of leather hard drying-shaving, smoothing, stamping, decorating, and impressing are effected, before firing, as per requirement. Subsequently, the products, are put in fire either in an open pit or oven or a kiln. Often the terracotta figurines are given a coat of paint and if it is oil based it serves as a preservator. Generally the figures were shaped by men and the colour was applied by women.

Function :

The real purpose of the early Indian terracottas remains rather controversial. It appears that the art was practised to produce devotional objects, or votive offerings, magical items, gamesmen, souvenirs and architectural members.

The shape and size of the piece determines its proper use and method of display. The Sunga period flat pleques with a hole on top were meant to be suspended through a cord. Heavy, round, hollowed figures were rested on the ground. The thick pleques with heavy base and without hole must have been displayed in the niche.

The sites :

Innumerable spots have yielded terracottas in India. The important ones which have attracted the attention of researchers include Mathura, Sonkh Ahichchhatra,

Sravasti, Newal, Bhitargaon, Jhusi, Kausambi, Ghosi all in Uttar Pradesh, Buxar, Chirand and Patna in Bihar, Devnimori in Gujrat, Kalibangan, Rangmahal and Suratgarh in Rajasthan, Tamluk, Pandurajar Dhibi and Chandraketugarh in West Bengal and Paharpur, Mainamati and Mahasthan in Bangladesh.

Historical sequence :

About half a century back the terracottas were studied on the stylistic grounds but now several sites have been scientifically excavated. This has resulted in framing a good chronology of terracottas and these rather neglected specimens have become a valuable source material to date other objects found either in excavations or through surface collection. Thus the historical significance of terracottas has immensely enhanced.

The Indian terrocottas have their first proto-types in Zhoab Kuilli sites in Baluchistan datable to the 4th millenium B.C. The figures mostly represent animals and women. Humped bull is a special feature. The size ranges between 5 to 10 cms. The female figures represent primitive treatment. Hand modelling, pinching, pressing and applique rendering are conspicuous. The mouth remains obscure and the hands are held akimbo. In the late phase the Kuilli and Zhoab figuirenes over lap with Harappan terracottas where the primitiveness is subdued and careful treatment is obvious. Now we notice a gradual transformation from peasant to urban culture. The hands hang down or spread out and the male figures also appear. The shape, size, and quality of bricks suggest that their users were sophisticated citizens.

After the disintegration of the Harppan culture by the middle of the second millenium B.C. there is a gap of about one thousand years and the earliest terracottas are seen again in the 6th century B.C. A great deal of controversy arises with regard to the proper grouping of these early figurines termed as 'Ageless', 'archaic', 'primiture' etc. These are modelled by hand and the face is shaped like bird or animal. The hair is shown by a few vertical strips on the forehead and the body is nude. These female figurines are termed as "mother goddesses".

The Mauryan period brings a change in technique and treatment when face is pressed out mould and the hairdo is elaborate. Male figures also emerge. In the Sunga period the figure is produced out of the complete mould and the pantheon develops. The hand modelling is revived in the Kushana period but the quality and quantity both descend. Gupta period terracottas are refined graceful and match the stone sculptures. The post-Gupta era is marked by the architectural or functional use of terracotta art. The beginning made at the Bhitargaon brick temple in the Gupta period continued and developed in Paharpur, Mainamati, Vishnupur etc. In the modern times the terracottas are used as drawing room decoration pieces and festival deities in urban areas and votive offerings and toys in the country side.

History is amply reflected in the terracottas from the earliest time to the present day and these figures serve as the mirror of the contemporary social movements and changes. The Kuilli and Zhoab objects bespeak of a simple pleasant culture and Indus items suggest an advanced urbanised civilization. There is a gap of about one thousand years between the proto-historic and historic phase in India. The continuity of urban life was broken with the extinction of the Harappan people and every thing seems to have started a fresh. Except the fine Painted Grey Ware followed by N.B.P. not much is left and terracotta objects are insignificant. The art revived with the introduction of the archaic female figurines which are representatives of the first plastic activity in the historical period.

Between the Mauryan and the Kushana phase, India had come into contact with the alien groups of people and this fact is amply reflected in the terracotta art although a detailed study of the different stocks of people is wanting. Foreigners were more mundane in nature and this phenomenon is noticed in the terracottas recovered from those sites which flourished as important trade centres through navigation. We have a large number of amorous and erotic figures from Chandraketugarh and Tamluk. The trade in flesh also became a conspicuous feature with the growth of mercantile activities in the Sunga-Kushana epoch and the wishes of the people who took away the terraçottas as Souvenirs from India to their native place were duly recognised in the depiction. The cupid is, however, subdued in the same period at Mathura which always remained a centre of pilgrimage despite a prosperous society and its contacts with the foreigners in the Kushana period. The recent decipherment of Kharoshthi letters on some pots of Kushana period in the Eastern India by Prof. B.N. Mukherjee ads a new chapter in the historic significance of early earthen ware. The Gupta period is known for revival of the Brahmamic cult and most of the kings of this dynasty were the Bhagavatas. Consequently, the terracottas of the age

represent the incarnations and their deeds and some of these are even inscribed in the Gupta Brahmi script. Such panels prove to be of considerable importance as source material of the Gupta period history. When the Buddhism dominated the imprints wore marked in thousands of terracotta seals issued from various Buddhist establishments and particularly from Nalanda and Budhgaya containing a Buddha figure, a high stupa and the Buddhist creed. Seals in early period sometimes record the name of the reigning king.

As source of art :

Being the first and foremost creation in art the terracottas have not only been the source of the study of development of art through ages but these have also inspired other art mediums to grow. The flexibility and plasticity of clay granted ample opportunities and scope to impart a desired shape and expression. For teaching and practice of art forms the clay played an important role as this most useful but inexpensive material was omnipresent. Unfortunately, the art historians while assessing and analysing the terracotta art have missed this vital point. The so called crudity, grotesqueness and disproportion have to be considered in the light. The other costly and hard material could neither be given to nor could it be handled by learness and novices.

Similarly, there are several other points which warront an unbiased observation while dealing with the subject. The scholars often call the terracotta art as 'primitive', 'folk', "poorman's art", 'rural', etc. It appears that these terms are loosely used and do not do proper justice with the magnificent art medium. If such prejudices are removed the terracotta art will definitely occupy a befitting place in the list of source material of history and art. It has been dear and loving to all sections of society and has, therefore, manifested itself in cosmic forms. We have to see and appreciate it from the same angle.

Lecture delivered at the Institute of Historical Studies, Calcutta, on 13.7.89.

Dr. R.C. Sharma
Director
Indian Museum
Calcutta.

Kauśāmbī Sealing of Mahārāja Tila [bhaṭṭa]

Kiran Kumar Thaplyal

General Description:-

The sealing under discussion from **Kauśāmbī, and** housed in the Allahabad **Museum, shows in the upper** field the device on a pedestal (indicated by a horizontal line) a lion seated on the hind legs facing a *chakra* placed sideways on the left. Below the device occurs a four line legend showing small letters in low relief in the eastern variety of Gupta characters of circa fourth century A.D. The legend reads:-

1. *Śrī bhaṭṭāraka pādā* [nu]
2. *ddhyāta mahāva (?) rakarika*
3. *mahārāja Śrī*
4. *Tila* [*bhaṭṭa*]

"*Mahārāja* Tila bhaṭṭa who was a *Mahāva* (?) *rakarika* and meditated on the feet of Bhaṭṭāraka." (Pl. 1)

The epithets:-

Bhattaraka literally means worthy of 'worship' and was an epithet used for the king. Its more elegant form was *Parama bhattāraka*, which is so commonly met with in the Gupta and post-Gupta epigraphs.

The term Pādānudhyāta literally, "meditating on the feet", may mean 'serving under', 'appointed by', 'attached', or 'favoured by' in different contexts. It occurs frequently in the epigraphs of the Gupta kings detailing genealogy wherein, in a general way, it is taken as indicating 'succeeded by'.

The reading *Varakarika* is tentative. The first letter looks like *dha* but *Dharakarika* does not seem to convey any meaning. *Varakarika* too is not known from other sources but at least it makes some sense as it would mean 'one who does noble deeds'. If it denoted an office, such an office would have been connected with matters relating to religion,morality, charity, etc., and could be somewhat like the *dharmamahāmātra* of the *Aśokan* inscriptions. It is however quite possible that it was a mere title conferred by king overlord on certain dignitaries for their noble deeds and did not carry an office with it.

Mahārāja in the Gupta period to which the sealing belongs, and also subsequently, was a little of a feudatory ruler or governor generally belonging to some royal family. The paramount sovereign during this period came to be designated as *Mahārājādhirāja* (often) with the additional epithet, *Paramabhaṭṭāraka*.

The name of the seal owner and his identification:-

The name of the owner of the seal is partly damaged. The first two letters of the name may reasonably be read as Tila. The third letter looks like bha. The fourth letter, however, is partly broken. We come across *Tilabhaṭṭaka* as a name of an officer holding the rank of *Mahādaṇḍanāyaka* during the reign of Samudragupta, as per evidence of the Allahabad Pillar Inscription. It is tempting to read the name as Tilabhaṭṭa on the sealing and identify him with *Tilabhaṭṭaka* of the said inscription, as variants of names met with in epigraphs. For example, the chief queen of Chandragupta II of the imperial Gupta dynasty has been referred to as *Dhruvadevi* in all the Gupta epigraphs[3] but as *Dhruvasvāminī* in her own seal from *Vaiśalī*[4]; Chandragupta II has been referred to by his another name *Devarāja* in a Sanchi inscription and *Devagupta* in a Vākāṭaka inscription[6], and the Vākāṭaka king Pṛithvishena is referred to as Pṛithvīrāja[7].

A parallel though of different nature, of the two forms *Tilabaṭṭaka* and *Tilabhaṭṭa* is seen in Achyuta met with in the Allahabad Pillar Inscription as a name of one of the Āryāvarta kings conquered by Samudragupta[8], and Achyu in Gupta script met with as a legend on some coins found in and around Achichchhatra[9]. The identification of *Achyuta* with *Achyu* has been accepted by practically all the scholars dealing with the Gupta history[10]. It would also not be out of mark if we propose the identification of *Tilabhaṭṭa* with *Tilabhaṭṭaka* particularly when the characters of letters on the seal closely resemble those on the Allahabad Pillar Inscription. Both the forms *Tilabhaṭṭa* and *Tilabhaṭṭaka* mean the same and the practice of forming new work by adding ka was not uncommon and has the sanction of grammer.

It may be noted that some scholars, even though they did not have any knowledge of the sealing that is being discussed here, suggested emendation of *Tilabhaṭṭa* for *Tilabhaṭṭaka* met with in the Allahabad Pillar Inscription[11]. We would consider *Tilabhaṭṭa* as the standard form of the name as it is this form which occurs on the seal, the device and legend from which must have been approved by the owner of the seal himself and, therefore, there would be the last possibility of error. Hence, hereafter we would be referring to the person as *Tilabhaṭṭa*, unless the reference is specifically in the context of the Allahabad Pillar Inscription. In passing, it may also be stated that with the evidence of the seal under discussion, the suggestion that *Tilabhaṭṭaka* in the Allahabad Pillar Inscription may be a mistake for *Tilakabhaṭṭa* has to be rejected.

The problem of titles :-

A major hurdle in the identification of Tilabhaṭṭa of the sealing with Tilabhaṭṭaka of the Allahabad Pillar Inscription would be that while the former has the title of *mahārāja*, the latter is designated as *mahādaṇḍanāyaka*. However, as we shall see below, this is not a serious hurdle. Dr. D.R. Bhandarkar, after a good deal of discussion, has come to the conclusion that the title *mahādaṇḍanāyaka* was generally conferred on the foudatories[13], and maharaja undeniably was generally on the foundatory on the Gupta and post Gupta periods[14]. But if the two persons are taken to be identical, then even accepting that both the titles are indicative of feudatory status one has to explain as to why the same person is referred to by one title in the seal-inscription and by another in the pillar-inscription. We may in this connection refer to Bhandarkar's interpretation of the occurrence of the titles *Kumaramatya* and *Mahārāja* in Amauna Copper Plate[15]: "Nandana, who issued the copper plate was not only a mahārāja or feudatory chieftain but also a Kumārāmātya, a dignitary of some rank in the court his overlord. But when he made his grant, he must have been in his own territory retaining and mentioning with pride the titular position he had attained[16]", We may likewise suggest that when Tilabhaṭṭawas referred to in relation to his Gupta overlord, the emperor Samudragupta, in the Allahabad Pillar Inscription, he was designated *Mahādaṇḍanāyaka* which title, in all probability, was conferred on him by his overlord. But when he issued documents with his own seal in his own territory, he used his titular *mahārāja*, i.e., a feudatory, which he enjoyed primarily by virtue of his being a scion of the old ruling family of *Kauśāmbī*.

Tilabhaṭa-Tilabhaṭṭaka as a governer of Kauśāmbi:-

The text of the Allahabad Pillar Inscription, as per its own testimony,was composed by Harishena, who was a *Sāndhivigrahika*, *Kumārāmātya*, and *Mahādaṇḍanāyaka*, but its execution was done by *Mahādaṇḍanāyaka* Tilabhaṭṭaka (=Tilabhaṭṭa). It is reasonable to suppose that the execution of the inscription at *Kauśāmbī* (where the Allahabad Pillar was

originally set up by *Aśoka* and in all probability was there at the time of the engraving the record) would have been assigned to this official because he was governing that region as feudatory of Samudragupta, which is supported by the sealing under discussion which, as stated earlier, also comes from *Kauśāmbī*[17].

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1. The sealing was examined and photographed by the kind permission of the Director of the Museum, several years back.

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3. E.G. ibid., nos. 16, 31, 44, 45, 46.

4. ASIR, 1903-04, p. 107, pl. XI, 1. Bhandarkar, op. cit., p. 261.

5. Bhandarkar, op. cit., no. 9, line 7.

6. D.C. Sircar, *Select Inscriptions,* 2nd. ed., no. 62 (Chhamak) Copper Plate Inscription, p. 444.

7. Vide, V.V. Mirashi, *Gupta Rājavaṁśa aur unake Abhilekha* (Hindi), pp. 206-07.

8. Bhandarkar, op. cit., no. 1, p.213, line 21.

9. E.G., B.J. Rapson, JRAS, 1897, p.420; V.A. Smith, *Catalogue of coins in the Indian Museum,* I, pp. 185-86; also, H.J. Alian, CCGD, p. xxiii.

10. *Ibid.*

11. E.G., S.R. Goyal, *Gupta Sāmrājya kā Itihāsa,* (Hindi), 1987, p. 156.

12. This emendation was suggested by the editors (B.Ch. Chhabra and G.S. Ghai) of the *Corpus Inscriptionum Indicarum,* Vol. III, by D.R. Bhandarkar, Delhi, 1981, p. 220 n.

13. The term daṇḍa means 'Army', 'a rod', and 'punishment'. The term daṇḍanāyaka has been translated variously as 'police officer' (Stein, *rājataraṅgiṇī,* I, *taraṅga* VII, v. 951; Vogel, *Antiquities of the Chamba* State, p. 123; Bhandarkar, ASIAR, 1914 - 14, p. 82); 'judge' (B. Prasad, State in Ancient India, p. 295, T. Bloch, ASIAR, 1903-04, p. 109, R.K. Mookerji, *Ancient India,* p. 331, etc.); 'Army officer' (H.C. Raychaudhuri, PHAI, 6th ed, p. 563; J.F. Fleet, CII, Vol. III, no. 1, p. 16 m; A.S. Altekar, *State and Government in Ancient India,* p. 343).

14. See Bhandarkar, op.cit., p. 95, "like 'Duke' 'Earl', and 'Viscount', *Mahādaṇḍanāyaka* was a hereditary title of nobility."

15. *EI,* X, p. 50.

16. Bhandarkar, *op.cit.,* p. 92.

17. The significance of the device on the sealing is under study and will be published separately.

Prof. Kiran Kumar Thaplyal
Department of Ancient Indian History,
Culture & Archaeology,
Lucknow University, Lucknow.

Some unpublished post-Gupta sculptures from Banaras C. 600-650 A.D.

Lalit Kumar

After the disintegration of the Gupta empire in the sixth century, Maukharis ruled over Banaras. On the east of Banaras were ruling the Guptas of Magadh. Most of the time they were at war. At this stage of Indian history, a ruler of the Vardhanas of Thanesvara, named Harṣa came into power in 606 A.D. He died in 648 A.D. During this period Harsa Vardhana annexed the territory from Kannauj to Banaras[1]. Hiuen Tsang, the famous Chinese pilgrim visited the country during the reign of Harṣa Vardhana. He also visited Banaras. According to him, the people of Banaras were rich, civilised and highly educated. He also informs that there were more than a hundred temples in the city[2]. But a little has survived the onslaught of the medieval invaders that could trace the development of art in the post-Gupta period at this great centre of art. The present author who explored the city in the year 1982-83, has discovered some sculptures of this period. Hence, this article.

Siṁhavāhinī

This big sculpture of the seated Siṁhavāhinī is under worship in the *Kāmakkhaya Devī* temple at Kamacchā[3]. The four armed goddess is seated in 'lalitasana' on a couchant lion whose curled tail rests in the lap of the goddess. The eyes of the goddess are painted and her body heavly daubed with vermillion. Therefore, no details are left with regard to her jewellery and costume. In the present condition the goddess appears nude as there is no indication of the hem line of her lower garment neither at her waist and nor on her legs (Pl. 1). But mention may be made that the nudity in the figure is also not shown. The goddess holds in her back hands a trident and an indistinct broken object. In the front right hands she holds a fruit *(matulunga)* whereas her left hand clasps a child. The latter is seated on the back of the lion. The head of the child is missing. A small crescent adorns the *dhammilla* type of coiffure of the goddess. Her jewellery includes circular *kundalas*, a necklace, armlets and anklets. A severely plain circular halo is seen behind her head.

A fifth century sculpture from Mathura represents a similar iconographic conception of the goddess but for the nudity. The hands of the goddess are broken but it is apparent from the remains that she carries a fruit in her right hand and the left supports a child in her lap.[4] On stylistic considerations when compared with the famous Indrani[5] in Bharat Kala Bhavan, Varanasi, and the Matrikas[6] from Mundesvari hill, now in Patna Museum, the present sculpture can be ascribed to c. 600 A.D.

Reliefs on an architectural fragment

This architectural fragment carved on two sides is also under worship on a circular plateform raised under a *pipala* tree adjacent to the Mānmandir Observatory. The

relief sculptres on both the sides are heavily corroded due to saline action as it is bathed every day by the lay worshippers who return after the holy dip in the river Ganges. On one side of it is relieved the figure of the river goddess Yamuna and on the other side *Śiva* and *Pārvatī.*

(A) The river goddess Yamunā

The goddess is standing in a graceful manner on her vehicle, turtle, in a niche that may be described as the key-hole type. She is holding a lotus in her upraised right hand near her shoulder and its stalk by her left hand (Pl. 2). The goddess has worn a skirt marked with ripples to suggest wet drapery of the goddess. She has also worn a scarf. Her jewellery includes an *Uru-sūtra* and *kuṇḍalas.* To her left is standing a female attendant holding a chhatra over the head of the goddess.

The disposition of the body of the goddess and the composition closely follows an early representation of the goddess Yamunā in the Pārvatī temple at Nācanā, ascribed to the last quarter of the fifth century[7]. But one can easily discern the upward thrust of her heavy right hip which suggests a post-Gupta date of the sculpture. It is also supported by the key-hole type of the niche which was popular in the seventh century as can be seen in the *Mundeśvarī* temple in District Shahbad in Bihar[8]. Therefore, this carved architectural fragment can be ascribed to the first half of the seventh century.

(B) Śiva-Pārvatī

The four armed ethyphallic *Śiva* is standing with her consort *Pārvatī* against Nandin. *Śiva* is turning face of *Pārvatī* towards himself by his upper right hand seen at her chin whereas his upper left hand has clenched her left shoulder (Pl. 3). His lower left hand holds a trident and the lower right hnd shows *varada mudrā* (?). Śiva has beautiful matted hair *(jaṭā).* He has worn circular *kuṇḍalas*, necklace, armlets, wristlets and a *yajñopavīta.* A snake hood is seen above his right shoulder. The two armed Pārvatī is standing coyly to his left. Her right hand is dangling down but her left hand is near her abdomen. Her costumes and jewelleries are difficult to discern but she has apparently worn a skirt. One may observe that Nandin who is eagerly looking at his master from behind, appears dwarfish in comparison to the height of the divine couple.

One of the earliest representation of *Śiva-Pārvatī* can be reckoned with an inscribed and controversially dated image from *Kauśambī* in Indian Museum, Calcutta[9]. It is dated to the year 139 of an unspecified era. Some scholars have reckoned its date in the Kalacuri-Cedi era which yields its date 387-88 A.D.[10]. Besides the archaic jewellery of Pārvatī, one my also notice that *Śiva* is two armed. His right hand imparts abhaya and a flask is seen in his left hand. The two hands of *Pārvatī* show *abhaya* and a mirror. Both the divinities have been treated in frontal position. Nandin is absent.

In the fifth century the Mathura sculptors fashioned beautiful images of the divine couple in similar frontal position which perhaps served as the model for such images for the subsequent period. In these examples *Śiva* and *Pārvatī*, both are standing in a graceful manner against Nandin whose head is visible behind *Pārvatī. Śiva* is two armed. His right hand imparts *abhaya* and he has clenched the left shoulder of *Pārvatī* by his left hand from behind. *Pārvatī* has also clenched the waist of the lord by her right hand from behind. But her left hand holds a *nilotpala* flower instead of mirror[11]. A similar sculpture of the divine couple from Mathura is in the collection of Lalbhai Dalpatbhai Museum, Ahmedabad. Iconography of this example fully agrees with the description of the divine couple as mentioned in the *Visnudharmottar Purāṇa*[12]. According to which both the divinities have thrown one of their arm on the shoulder of each other. *Śiva* holds an *utpala* flower in his right hand raised to his shoulder and *Pārvatī* holds a mirror in her left hand. But *Śiva* is not having eight faces as the text prescribes. The sculpture is carved in round and shows a halo behind the head of both the divinities.

The iconography of *Śiva-Pārvatī* has also been dealt in the *Matsya Purāṇa.* According to which *Śiva* should have either two or four arms. In the case of the latter he should carry a *utpala* flower and a trident in his two hands on the right whereas the remaining two hands on his left should clench the left shoulders and the breast of the goddess. The text describes *Pārvatī* as two armed. In this case her right arm should be thrown either on the right shoulder or the right waist of the lord whereas her left hand holds a mirror. We have already noted this in the Mathura example where she has clenched the lord at his waist by her right hand.

Four armed *Śiva* with his consert seems to have come in vogue in the sixth century A.D. The example discussed

here falls in this category. But one may observe that the head of Nandin is visible now behind the lord instead of *Pārvatī* as seen in the fifth century example from Mathura referred to earlier. A Snake hood can also be seen now above the right shoulder of the lord.

What is more interesting in the present sculpture is the representation of the Nandin as a dwarf animal. The height of Nandin usually reaches at the thigh level of the lord but here Nandin is only knee high. With regard to this J.N. Bānerji has made an interesting reference to the *Rāmāyaṇa* which describes Nandin as having a monkey like appearance and as a short armed dwarf animal[14].

Finally we may described the bust of a Surya (Acc. No. 20103) in the collection of Bharat Kala Bhavan, Varanasi. The sculpture is carved in buff coloured sandstone. His both hands upraised near the shoulder are broken. The God is flanked by a famale attendant on either side. Both the females are disposed in a manner as if they are shooting an arrow and thus they can be identified as *Uśā* and *Pratyūśā*. Curiously enough they are not shown with bow and arrow. The female on the right is shooting the arrow on the earth whereas the female on the left has aimed at the sky (Pl. 4). Both the females are also shown in somewhat *ālīḍāsana*. This seems to be a rare type of representation of *Uśā* and *Pratyūśā* in a Surya image.

The bust of Surya is characterized by a short truncated crown, a circular halo with beaded border, double stringed necklace with a pendant and a *Udarbandha* which are the post-Gupta features and can be compared with the sculptures from the Mundesvari hill temple. Therefore, the bust of Surya image can be ascribed to the first half of the seventh century A.D. The *udarbandha* seems to be a feature of Banaras school of the post-Gupta period which had perhaps influenced the art of Mundesvari hill temple. Further development of this style of Banaras is witnessed in some of the Surya images of the eighth century in the collection of Bharat Kala Bhavan.

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3. The author is thankful to the priest who readily agreed to remove the red cloth covered on the image for photography.

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6. *Ibid.*, plate 55 and 56.

7. Williams, J.G., *op.cit.*, fig. 154.

8. *Ibid.*, fig. 255.

9. *Ibid.*, fig. 31.

10. *Ibid.*, p. 36.

11. *Ibid.*, fig. 77.

12. *Yugmaṁ strīpuruṣaṁ kāryamumeśo divyarūpiṇau aṣṭavaktram tu deveśaṁ jaṭacandrārdha bhūṣitam / dvipāṇiṁ dvibhujāṁ devīm sumadhyāṁ supayodharām vāmapāṇim tu devasya devyāsyaskandhe niyojayet // dakṣiṇam tu karam śambhorutpalena vibhuṣitam devyāstu dakṣiṇam pāṇim skandhe devasya kalpayuet / vāmapāṇim tathā devyaī darpaṇam dāpyecchubhaṁ //*

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Dr. Lalit Kumar
Lalbhai Dalpatbhai Museum,
Ahmedabad-308 009 (Gujrat).

Some More Early Sculptures From Banavasi (Karnataka)

A. Sundara

Banavasi (Sirsi Tk, Uttara Kannaḍa Distṭ) a noteworthy centre for Buddhist activities during the reign of *Aśoka*, the Mauryan emperor (circa 273-234 B.C.) and later, an important trade centre referred to by Ptolemy (circa 150 A.D.), was the administrative headquarters of the Chuṭus a feudatory to the *Sātavāhanas* of the Deccan[1] and successively the capital of the Kadamba kingdom founded by *Mayūraśarma* (Varma) in the early decades of fourth century. The inscribed (Muchalinda) Nāga inscription recording the donation of the Nāga image, a Vihāra and a tank by *Śivaskana Nāgaśrī* the Chuṭu princess and daughter of Viśṇu Chutukulānanda *Śrī Śatakarṇi,* from this place is too well known[2]. Surrounded by a brick fort of the *Sātavāhana* period, strengthened and enlarged during the early and later Kadamba periods[3], the place has numerous temples more than a dozen ranging in date from at least 8th cent. to 17th cent., of which the *"Madhukēśvara"* is the most well-known and even today popular in the region.

Recent discoveries

Over the past two decades many sculptural pieces and inscriptions of 2nd-6th cent. from this place have come to light by chance from time to time[4]. Besides, excavations by the Directorate of Archaeology and Museums, Govt. of Karnataka and the Deptt of Studies in Ancient History and Archaeology, University of Mysore under the direction of Seshadri, M., brought to light two large apsidal brick structures and a sculpture of Kartikeya (?)[5]. Many of the sculptures among these are discussed by me elsewhere[6]. Here in particular an early sculpture of Hāritī (?) is discussed besides giving a brief note on a few other sculptural fragments.

Devi (Hāritī ?) Pl. 1 a, b & c.

The sculpture in round relief representing a dēvī is unfortunately badly mutilated. The upper part of the head, the chin, the hands, the left knee and the feet are broken. The devi is seated in pralambapādāsana, on a plain square moulded pitha with the hands placed on the thighs. The figure with prominent round breasts is hefty, sturdy, but yet is gracefully proportionate. Likewise the ornaments such as the large spiral Karṇakuṇḍalas set with jewels; thick, bold necklace with flat large pendent; bangles of varieties such as boldly segmented, plain with triangular section; thick rounded (perhaps hollow), covering almost entirely the fore-arm; jewelled vṛitta valaya for the arm; thin ornamental band and thick jewelled anklets for the legs enhance the bold form of the impressive personality. Besides, there is a thick long hāra with a *śankha* as a link at the lower middle in the front, worn in upvita fashion. The hairs are neatly combed back plaited into a knot at the end, a distinct hair style. The lower garment is flatly spread in the front without folds from the waist, an unusual mode of wearing.

The earthly form, the characteristic ornaments and the mode of wearing the garment and, particularly the hair style that immediately remind the female bust of the Kushana period from Giridharpur near Nathura[7], almost undoubtedly suggest that the sculpture is of circa 2nd cent. A.D.

Earlier a sculpture similar in form, posture, ornaments was found in this place (Pl. 2). In that sculpture there is a male child placed on the left lap held by her hand. I have discussed this sculpture considering the occurrence of a similar sculpture of Hāritī in Nagarjunakonda and particularly the Nāga inscription and the Kadamba copper plates describing the rulers as "Hāritīputra" and identified it as Hāritī the Buddhist goddess the protector of children[8], worshipped by people of all sects and clans. The sculpture under discussion, therefore, in all probability is also Hāritī, originally with the child on the left lap now missing. Stylistically this appears to be a little earlier than the other referred to above, belonging to the Chuṭu period. These two sculptures display stylistic development of the sculptural art of this form during the Chuṭu-Kadamba period. These are the first of their kind to be found in Karnataka in particular.

Other sculptural relics

i) Back support (Pl. 3a and b) :

The sculptural fragment appears to be the left part of a back support of a seat on which was probably the principal bigger sculpture. The seated kubja attendant in bas relief in the support was perhaps flanking the main figure. Behind the attendant are segmented strips of thick cloth covering the hard surface of the support. The joints of the vertical segments are in turn covered with folded cloth. To the right of the attendant on the rounded top edge are designs of lotus flower in low relief.

The attendant with pot belly, U-shaped plumpy face holds something unidentifiable in the right hand. The characteristic features of the support and the physical form of the Kubja suggest the relic to be of circa 2nd c. A.D.

ii) The human arms (Pl. 4 a, b and c)

Of the three pieces, two are the right arms of two separate human figures. What is noteworthy is the spiral vritta valaya covering almost the whole arm from elbow to the arm-pit. In Mathura area in the sculpture of beautiful "Darpaṇa Sundarī"[9], of the Kushana period, there is a similar ornament to the arm. These pieces are probably parts of Surā Sundarī or Yaksī sculptures.

The third is a bare, supple left arm without any ornament exposing its incipient natural tapering. The extant part of the chest is mutilated. Fortunately the spiral puspakundala is prominantly extant.

These fragments are of large sized sculptures in round relief forming a class by themselves known for the first time in Karnataka.

Observation

These sculptures together with the other sculptures of 2nd-3rd cent. such as Maitrēya (?)[10], Yakṣī with inscription, *Gaṇēśa*[11], kubjā yakśa from nearby Gudnapur[12], as well as the inscribed Nāga inscription all from this place, clearly indicate flourishing sculptural activities; the art form and style of the Mathura-Kushana tradition, popular and sectarian practiced over wide region : the Central India and the western Deccan, including north-western Karnataka rather more distinctly than that of the Eastern counter part : i.e. the Amaravati-Nagarjunakonda. Secondly, these shed a welcome light on the sculptural art of the Śatavāhana-Kadamba period in northern Karnataka which was least known till recently.

Acknowledgement

I sincerely express my grateful thanks to the Archaeological Survey of India, particularly Sri K.P. Poonacha, Superintending Archaeologist and his staff in Banavasi of Bangalore circle for permission to study the above sculptures in the site Museum in Banavasi and to take their photographs. These and other sculptures of this place referred to above were collected by the staff of the Survey and are displayed in the Museum.

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Prof A Sundara
Dept. of Studies in Ancient
Indian History & Epigraphy
Karnataka University
Dharwad-3

Malhār Image—An Identification

B.B. Sircar

Sequestered in the silence of the sleeping hamlet of Burhīkhār near Malhār in the Bilaspur District, Madhya Pradesh, stands a four-armed male figure of stone. The icon, known locally as Chaturbhujī Bhagavān, holds *chakra* in the upper left hand, and in the upper right hand the deity holds a *gadā*[1]. Sircar says the palms of the lower two hands are folded in the *añjali* pose[2]. However, the deity holds a conch pressed to his chest by his two natural hands, and,as such, the suggestion that they are in *añjali mudrā* is not acceptable. Agrawal says the conch in the hands of the diety is "in an unusual manner"[3]. The deity wears *Kuṇḍalas*. A conical crown decks the head of the icon. The *parṇa vastra* on the loin of the diety is interesting. The line of Brāhmī characters on the *gadā*, has been dated in the second century B.C.

Sircar remarks, "The image has characteristics of the god Vishṇu, but the *añjali* pose clearly suggests that it is not Vishṇu but a *parivāra-devatā* or attendant of the god.[4] K.D. Bajpai calls it *Vīra rūpa* of Vāsudeva-Kṛiṣṇa in *gopaveśa*. A similar four-armed conch-blowing-image of Vāsudeva-Kṛiṣṇa of red sandstone of the Kuṣāṇa period has been reported from village Sondh, 87 kms. east-south of Gurgaon on Nuh Hodol road, not far from the Mathura region[6]. In this context a reference needs be made to an image from Nālandā, datable to about the ninth century. The upper two hands of the deity hold mace and disc, while the front two hands hold a conch near the chest, as if preparing to blow. Kalpana Desai remarks, "It is difficult to understand what the sculptor tries to represent by this"[7]. We are of the view that such images represent a Kṛṣṇite līlā scene. The Malhār and the Nālandā images are separated by a millennium, yet they tell the self-same story of the slaying of *Saṅkhāsura*, the demon of the deep.

The Malhār image is weather worn, and the better preserved Nālandā image lends itself to closer study. Swift cascading down of the shoulder is an age-old principle of art anatomy for fashioning child images. In the Nālandā piece the diminutive shoulder swerves swiftyly down the deltoid muscle, ineffably suggesting the figure to be that of a child. Since the above two images are iconically similar and relate the same episode in the life of child Kṛiṣṇa, it may be presumed that the Malhār image purports to show the deity to be child *Vāsudeva*-, Kṛiṣṇa..

The *Harivaṁsa Purāṇa*,[8] the *Visṇu Purāṇa*[9], the *Bhāgavata Purāṇa*,[10], the *Brahma Purāṇa*[11], the *Brahmavaivarta Purāṇa*[12] and the *Devī Bhāgavata Purāṇa*[13] refer to the pupilage of *Balarāma* and *Kṛiṣṇa* under5 *Sāndīpani* of Avanti. The guru was a brāhmaṇa of *Kasyapa gotra*, and hailed from Kaśī.*Balarāma* and *Kṛiṣṇa* with the intent of becoming pupils of the eremite *Sāndīpani*, repaired to his hermitage named Aṅkapāda. The guru imparted them training in archery, in sixty-four arts and the Vedas besides the *upāṅgas*[14]. The *Devī Bhāgavata Purāṇa* says that *Kṛiṣṇa* was twelve years old

at this time.[15] The *Hari Vaṁsa Purāṇa,* however mentions *prāptayauvanadeha* of *Kriṣna,* in this context. The *Purāṇas* are unanimous that the divine disciple *Vāsudeva Kriṣna* learnt the sixty-four arts and the vedas etc., in sixty-four days.

After completing their education *Vāsudeva Kriṣna* and *Balarāma* offered to pay *gurudakshiṇā* to Sāndīpani, whereupon the teacher asked his divine pupils to bring his dead son resurrected from the domain of Death. Guru Sāndīpani further told the twin brothers that his son was killed by Timi, of brakish waters at Prabhāskshetra. Timi the sea demon, popularly known as Pāñchajanya, hid in the sea in the form of a conch. Accompanied by *Balarāma, Vāsudeva* reached there. The Lord of the Sea, fearing the ire of *Vāsudeva,* informed him about the misdeed of Pāñchajanya. Therefore, *Vāsudeva* killed Pāñchajanya, but to no avail; he then pounded the bones of the demon and fashioned his famous Pāñchajanya conch. He then reached the abode of Yama, their arms clashed and the Lord of Death was vanquished. He made Yama to yield him the teacher's kin. *Vāsudeva* blew the Pāñchajanya conch, and the dead son of Sandīpani was resurrected.[16] The same episode of the resurrection of the dead son of Sāndīpani occurs in the *Skandha*[17] and the *Padma Purāṇa*[18].

In the Nālandā piece the child deity stands on a blooming lotus which "represents the life-bestowing, fertilizing element of the terrestrial waters," Lotus is the generative organ of the waters.

In the episode of death on the high seas, the conch is fashioned from the pounded bones of the demon. The conch is formed by mollusk type of invertebrate animals living in the seas, and is rightly called an *'asura'* in as much as it takes breath of one who blows it (asu-breath and ra-taker)[19]. The divinity makes the clarion call of the conch, the retriever of the dead soul, nay a resuscitant power.

The Nālandā image purports to show that the Saṅkhāsura has been conquered, the dead son has been restored alive to Sāndīpani; and a subtle smile irridiates the face of the death-destruction triumphant deity. Garuda, the fair feathered falcon *(suparaṇa),* an inveterate foe of the serpent demon, sits at the feet of the divinity with folded hand in obeisance. In the Malhar piece, the demon-slaying deity is depicted with a dagger on his waist, befitting his accoutrement.

That in its early heyday of artistic *elan* and prolificity of creativeness, the Mathura art *ateliers* did not produce *Kriṣna-lilā* scene, has baffled the wits of scholars[20]; but the Malhār and the Soudh images indicate a long tradition of art represention of *Kriṣna lilās.*

The above identification of the Malhār, the Sondh, and the Nālandā images indicates that the legend of child Krisṇa's Pāñchajanya killing exploit hark back to the pre-Christian centuries and continue through the Kuṣhāṇa period to the millennium that followed. The Malhār child Vāsudeva image of the second century B.C. challenges the Ābhīra origin theory of the cult of child Kriṣṇa. Plastic configuration of a divine act pre-supposes a well-established religious sensibility of a society, and, as such, the Malhār evidence pushes the cult of child *Kriṣna* to a period before the Abhiras made their debut in India.

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Sri B.B. Sircar
91/26, Yadunath Sanyal Road,
Lucknow.

Recent Numismatic Discoveries of the State Department of Archaeology

Natana Kasinathan

In the year 1989-90 the State Department of Archaeology has made some outstanding discoveries of coins belonging to different dynasties. Chronologicaly speaking the chola coins of sangam age come first. Following this the Pallava lead coin is to be mentioned. Interestingly enough one more chola coin of medieval period has also been collected. To the credit of Pandyas a hoard of Sundara Pandya coins was also unearthed.

The chola coins of Sangam age are three in number. They were brought to the notice of this department by Thiru Jesudas, a student of the Institute of Epigraphy of this department. He had collected these coins from Kattucheri and Tirukkadaiyur near Poraiyar on surface level. Though these are not found in stratified level they are important for the study of patterns, shape and metal of the coins of sangam cholas.

The coin unearthed from a trial trench at Vanagiri bears the figure of a tiger on the obverse and an elephant on the reverse. Another coin found from Pallavaneeswaram bears a Chaitya Vriksha on the obverse and an indistinct emblem on the reverse. Of these coins of present collection, one bears clear pictures of a tiger with a tree in railing on the obverse and an elephant, a good and a wheel and an umbrella on the reserve. It is the first time that we see the elephant with a good and a wheel and a parasol on the revere of a sangam chola coin. It is quite interesting to note the occurrence of the tree in railing in chola coin for it makes one to presume their association either with Buddhism or with the ancient custom of tree worship.

The second coin bears the usual figures of a roaring tiger on the obverse and the elephant on the reverse. The third coin bears a die exhibiting a spear like thing.

The Pallava coin was brought to the notice of this department by a school headmistress Tmt. S. Santha, from Thiruvanmiyur. It is gathered from her that this coin was noticed when the school children dug a pit for planting the flag pole. It is a significant find since the coin is in lead bearing the figure of a humped bull facing right on the obverse and a tree in railing (Chaitya Vriksha) and a vase on the reverse. It is quite similar to the coins found from Kanchipuram barring some minor variations. This coin assumes more significance because it bears the figure of a vase with the vriksha. Pallavas are said to have originated from the pitcher. So it may be presumed that the vase found on this coin represents the pitcher origin of Pallavas. The date of this coin can easily be assigned to 5th century A.D. as the Kanchipuram lead coins were found in the layer of early Pallava age assignable to 5th century.

The chola coin collected by this department is a unique one as it has the legend reading *'cho'* in Grantha character on the reverse. It is quite interesting to note

that the usual legend *'Rājarāja'* is found written in Nagari on the obverse with the ceylon man while another legend *'cho'* is written in Grantha in the first line on the reverse. The second line may be *'lan'* as *'cholan'* written in Uttamacholan coin.

Hence it assumes great importance in the annuals of Chola numismatics. The letter *'Cho'* is more clear and quite similar to the letter *'cho'* found written on Uttamachola coins. It is obvious that the issuer might have intended to indicate that this coin was the issue of "Rajaraja Chola". This is the first chola coin bearing the legends written on one side in Nagari on other side in Grantha i.e. in two different scripts. This interesting copper coin has been collected from Tranquebar by Thiru A. Rajendran, Curator of our department.

The coin hoard of Pandya king was noticed by Thiru Ganesan, Curator of our department. He was able to collect 27 copper coins from Valantaruvai near Rameswaram. All are the issue of Sundara Pandya. Of the 27 coins 25 bear the legend of Sundara Pandya in two lines in Tamil characters on the obverse, and two fishes with a whip (Chendu) on the reserse. Among the remaining two coins, one has the legend Sundara Pandya with two fishes and the whip on the observe and the figure of a boar facing right with two symbols representing sun and moon on the reserve. On the other coin the same legend is written with two fishes and a whip on the obverse and the figure of boar facing left with the symbols of sun and moon on the reverse. The above two coins are more significant as they reveal the relationship between the Pandyas and the Chalukyas. These coins are to be assigned to 11th century A.D. on the basis of paleography of the legends written on these coins..

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Dr. Natana Kasinathan
Department of Archaeology,
Govt. of Tamilnadu, Madras-28

The Kumrahar Stone Pillared-Hall

B.P. Sinha

Quite close, west of the Wooden Platform at Kumraharin South Patna, are the ruins of the 80 stone-pillared Hall. Spooner, who discovered it asserted, "At Kumrahar we have succeeded in definetely locating a vast pillared hall of the Mauryan date (3rd Century B.C.) .... 8 rows, of 10 columns each, each being 15′ apart from the other—· the hall was of exceptional magnitude and magnificence. The columns were polished monoliths, some 3′.6′ diameter at base, and not less than 20′ high—were of Chunar sandstone, erected without pedestals, without socket or hole, and stood on wooden floor of the hall or on square platform of logs........ the columns within the body of the Hall appear to have borne surrounding girdles cut in the actual monolith at a point some 5′ above the base, and attached to the main shaft by means of four projections from it, one on each side of the column[1]. He further observes the shaft is smooth and polished *down to the base* (which is not polished), so must have rested directly on floor. The pillar has interesting symbols and mason marks— a set of three rows of the circles[2]. He further argued that the bases did not extend far enough to constitute a railing." Could they have supported some ornamental medallions or some other purpose ? Did they support some band of stone or wood which encircled the columns as a girdle ?

The site of the Hall was re-excavated by Altekar and Mishra[3]. Additional information about the construction of the Hall were made available. The excavations confirmed that there were eight rows of pillars, each having ten columns. The Hall was entered from the south and had probably a porch of four pillars at its entrance .[4] More light has been thrown on the method of erecting the pillars. The foundation-trench for the pillar was 5′x5′x5′ from the floor level of the Mauryan period. This trench was covered with 6″ thick dark blue clay. Spooner had discovered at 5 places wooden bases to distribute the weight of pillars, but no such wooden structure was traced for the vast majority of pillars. But Altekar found supports of wooden bases in the case of four pillars, conjectured to be porch-pillars, and to conjectures the possibility of such bases for all the pillars, whose traces are lost by now.[5] On these wooden basements about 4′.6″ square above the blue clay were fixed the monolithic pillar which was 32′.5″ high and not 20′ as supposed by Spooner. This wooden platform was 4′.6″ below the Mauryan surface-level and over that was the plinth of the Hall 3′.6″ mainly of filled up earth. So about 9 feet of the erect column was underground or under the surface level of the plinth. But this does not explain why the entire column down to the base was polished. This is quite in contrast to free-standing *Aśokan* columns which are smooth polished down to the surface, but the shaft underground was unpolished, though rough-dressed. At the same time the base of the pillar of the hall was rough-dressed unpolished naturally it was bound to be out of sight of any visitor. An explanatory of this curious feature may be attempted

here. The pillars were manufactured, finished and polished at some other factory, probably at Chunar and were transported to the building-site in finished condition. It could be that the masons responsible for the construction of pillars did not know the exact length of the pillar to be under surface-level, probably the architects of the Hall did not or had not the time to give details of the exact plan of the Hall before hand; so the mason not taking risk polished the entire surface of the pillar from top to the end.

No evidence of the flooring and ceiling of the Hall was directly available but the 1 foot depth of the ashy layer containing proof of conflgaration would suggest a huge mass of wood reduced to ashes. So the floor could have been of dressed wooden planks and the ceiling of wood-rafters, bamboos, palm tree trunks, and reeds and straw. No tiles were recovered. The ceiling rested directly on pillars without Capitals or brackets, and must have been very heavy necessitating as much as 9′ of pillar being put under the plinth and underground to support the roof. The pillars may have been tied by copper bolts and heavy ropes. No evidence of any gold or silver filigree work was found. No walls enclosing the pillars were noticed so the Hall was an open pavillion and there appears to be no basis to hold with Spooner that the Hall would nearly have been divided into a series of closed pens, shuttering the building to the access of any intruder[6]. In the excavations 1951-55 trenches were taken in all the directions of the Hall,and no substantial civil architecture could be traced. The history of the Hall in the light of latest excavations appears to be quite different from what Spooner had inferred and speculated. Spooner had noticed a thick layer of ashes just below the Gupta walls. Between the ashy layer and the Mauryan floor, there was no notice of human habitation. So there was flood, according to Spooner, in the early centuries of the Christian era, and 10 feet of sandy clay filled the pillar from the floor-level but it appears that the Hall could have survived in use. But the Hall was burnt down some time after the flood, and the Gupta buildings stand on the ashy layer caused by conflagaration in the 4th or 5th Century A.D., more probably 5th Century A.D. Spooner argued that the conflagaration caused cracks in the stone columns standing above the huge accummulation of silt and the heat led to the expanding of copper belt which were fitted into the socket holes observable in the top fragments of the pillars. This exhausion caused the vertical cleavage observable in large fragments. This led to column sinking down further and with the rise of the flood level in course of time the shaft sunk still deeper leaving only stumps of pillars and vertical cavities[7]. Thus the destruction of the Hall was placed in the Gupta period because in Spooner's opinion the building built on the level above the destruction of the Hall is late Guptan. Marshall took these buildings to be of 7th or 8th Century A.D. and so the Hall was believed to have been destroyed prior to the arrival of Hsuan Tsang in 635 A.D. However, excavations of 1951-55 unfolded quite a different story, a sequence of building activities in the Śuṅga period above the Hall. Due to paucity of available space for taking proper trenches directly above the Hall, trenches were taken near the Tomb and their excavations made it clear that after the Hall was burnt down and destroyed, structures were built over it during each of three successive periods— Period II (C. 150 B.C.—100 A.D.), Period III (.C 100—300 A.D.), and Period IV (C. 300—450 A.D.). The Hall was destroyed before the structures of Period II were built some time during C. 150 B.C. and 100 A.D. It is possible to suggest that the destruction of the Hall was a consequence of the Greek invasion during the reign of Pushyamitra Śuṅga[8].

What was the purpose of the Hall ? Marshall opined, "The Kumarahar remains are a group of palace buildings of which the Hall of Columns is an integral part[9]. The identity of the Hall was even to Spooner not clear. It could be a Hall of Audience or even the Throne-room of the Mauryas[10]'. Later Marshall refers to the remains of a pillared hall at Patna, which probably formed a part of a royal palace .... But it is to be noted that the stone-pillared Hall is not a part of a palace complex as there were no remains of secular and administrative buildings in stone or brick contemporary with the Hall. No remains of stone-capitals were found when both Fahsien and Hsüan Tsang refer to *Aśokan* stone columns with capitals in the palace complex. In view of the archaeological evidence to-date it appears to be difficult to hold that the *Hall* was an integral part of the palace-complex of the time of Candragupta Maurya. S.P. Gupta suggests that the Hall was an open pavillion of Candragupta Maurya, on a canal, for the purpose of spending evening with Dance and Music, sometimes with courtiers and other times with friends and relatives [11]. This view also appears to be teneous. One cannot explain why such a site of mirth and pleasure would be selected for monasteries, even in the Śuṅga period, when for some time the baradari – the Hall, appears to have survived. But the more crucial question is – is there any positive evidence to prove that stone, on such a large scale, was used in the time of Candragupta Maurya ?

Megasthenes clearly refers to wood, mud and bricks (probably sun-dried, as actually no substantial kiln-burnt structure of pre-. *Aśoka* period has been exposed in the area so far), and no where he mentions stone as a building material and could not have missed the notice the so-called 'baradari' when he described the city and the palace in glowing terms.

To us, therefore, it appears to be more reasonable to take the Hall, to be the Buddhist Assembly Hall specially built by *Aśoka* for the 3rd Buddhist Council at Pataliputra. The entire Kumrahar site from the Śuṅga to the Gupta period is a Budhist monastic site, and rightly so as traditionally a religious site in India had the tendency to persist as a religious site, even of different religions, as is obvious from history of religious sites in India. It was a mosque not a secular or royal structure which was raised on the ruins of a temple in the medieval period. There appears to be no merit in the observations of Gupta that "the structure is unsuitable as the venue for the kind of gathering or the General Assembly of the Buddhists, held under the patronage of *Aśoka*. Monks coming by boats in large numbers and climbing up the hall is rather too cumbersome to merit serious consideration". Knowing what problems of labour, resources and hazards were faced by Firuz Tughlaq in transporting the *Aśokan* pillar from Meerut to Delhi, one can visualise the resources and manpower used by *Aśoka* to transpost at least 80 pillars, and probably some with capitals in the city noticed by Fahsien, it would be easy to visualise hundreds of monks reaching the Hall by canal. They were necessarily not too old to climb a few steps alighting from the boat to the Hall. Then it may be mentioned that the Hall was approachable by land from east and north, a route that could be taken by Buddhist monks for participating in the council-proceedings.It is reported that there existed a Kumāra vihāra (probably associated with Mahendra) in the area and this must have been a substantial structure (unfortunately not excavated so far) to house the delegates to the Council. It could also be a part of *Aśokārāma vihāra* built by *Aśoka* specially for the conference. The possibility of the Hall have been an Assembly-Hall has been aired since the hall was being excavated. Spooner himself speculating about the identity of the Hall, wondered if it was 'A Hall of Conference of an exceptionally vast and important monastery'[12]. The Excavators of Kumrahar excavations clearly state – "The view usually held that the Mauryan palace in Pātaliputra seen by Fa Hien may be the present pillared Hall is untenable"[13]. In my contributions to the Directory of Indian Archaeology edited by A. Ghosh some time in seventies, I had strongly put forward the arguments for taking the Pillared-Hall as the venue of the Buddhist Council by *Aśoka*.

Let us now discuss briefly the life-time of the Pillared Hall. The Hall was built in the Mauryan period. In our opinion *Aśoka* got it constructed. It was destroyed and burnt in the time of Pushyamitra Śuṅga certainly before 150 B.C., when Patañjali officiated as the highpriest at the horse-sacrifice performed by Pushyamitra presumably after his success in rolling back the Bactrian Greek invaders from Mauryan frontiers. There is no evidence that the pillared-Hall was standing in the Gupta period. Kumrahar Excavations 1951 – 55 have conclusively proved this. There is no conclusive evidence of massive flood suggested by Spooner, as the flood-silt must have spread over entire area and not limited to pillared-positions. Over the ruins of the Hall were built Śuṅga structures — monasteries. Fahsian, who describes the Mauryan palace in glowing terms certainly did not see the Pillared-Hall, and it is clear that the palace-complex which then was standing in Fahsien's time was somewhat away from the area of the Pillared-Hall. He clearly says that "the royal palace and halls in the midst of city which exist now as of old'. But he refers to the great stupa built by *Aśoka*, more than three *li* to the south of this city. We know that the Pillared-Hall was not that distant from the Choti Pahari which is supposed to be the site of the Great Stupa. So the great palace complex of *Aśoka* built of stones, piled up by the spirits who reared the walls and gates and executed elegant carving and inlaid sculpture work – in a way which no human hands of this world could accomplish"[14], was certainly not in the area of Pillared Hall which was almost an isolated structure yielding from its excavated ruins no evidence of 'elegant carving and inlaid sculpture work'. And the fact as proved by recent excavations that the Hall was destroyed in the 2nd Century B.C. proves beyond doubt that it did not form a part of the palace-complex, which stood in all its splendour and glory in the time of Fahsien in the 4th Century A.D.

So the Pillared-Hall had a short span of life, about one hundred years only. But the remarkable stone columned Hall appears to have no clear antecedent nor any successor in India. What was the source of the conception of this grand plan, and who were the architects who fashioned this large open hall resting on highly polished monolithic columns arranged in rows and equi-distance from one another to form this grand Hall of 'exceptional magnitude and magnificence'.

To Spooner, who first excavated the Hall, "the resulting ground plan exhibits a pronounced similarity in *essential features* with the famous hall of a hundred columns at Persepolis" and speaks of probable connection 'between the two'[15]. Spooner developed this idea of Iranian influence further in his article 'the Zoroasterian Period in Indian History' in JRAS[16]. Marshal, who dubbed Spooner's theory as 'deductions and conjectures, admittedly tentative', though 'interesting and suggestive', was constrained to remark— "The points of resumblance between the sites of Kumrahar and Persepolis are so strking that it will be something more than strange if they prove to be outcome of mere accident"[17], and V.A. Smith thinks that 'Spooner has proved that the Kumrahar building was copied from a Persepolitan original[18]. Later Wheeler in Ancient India No. 4 echoes the arguments and conclusions of Spooner and Marshall. To Coomarswamy the remains of the great Hall with stone pillars "seems to have been planned on the model related to that of the pillared halls of the Achemenid Kings of Persepolis"[19]. N.R. Ray has no doubt that 'the impetus came from outside', though he is aware of the vital differences between the columns of Kumrahar Hall and the Hall at Persepolis[20]. Smith feels *'some* confidence in affirming that the sudden adoption of stone as the material both for architecture and sculpture was in a large measure the result of foreign perhaps Persian example[21]. Percy Brown even thinks of throne-room in the Pillared-Hall at Kumrahar as at Persepolis and concludes that 'the use of mason mark proves Persian and Median employment[22]. In the opinion of Benjamin Rowland, "Enough fragments remained to show that the plan of this hall corresponds very closely to the arrangement of the great pillared rooms of state that are amongst the most striking remains of the Achemenid palace ruins at Persepolis[23].

We have already said that the Pillared Hall is not a part of the Mayryan Palace-complex, either of Chandragupta Maurya or *Aśoka.* S.P. Gupta has rightly pointed out that there is no palace for a throne in the excavated Hall. The differences between the Parsipolian column and the Kumrahar column are too obvious. Pillared Halls are not unknown to Indian Archaeology and literature for pre-Mauryan times. We had found a brick-columned hall at Mohanjodaro. While no clear generick connection between two so distanced in time and space can be contended, the value of tradition leaving its mark for thousand years in one form or the other cannot be brushed aside as a wild dream. There are numerous references to many-storeyed halls, certainly of wood in the Buddhist and the Jaina literature referring to the time of the Buddha, Saṁsthāgāra or Sabhāgāra of the political and religious assemblies. The roofs must have been supported on columns most properly of wood. The confirmation comes from inscribed scenes on Buddhist monuments of Sanchi and Bharhut belonging to 2nd and 1st Centuries B.C. On one of the railings of Sanchi, there is inscribed a scene depicting *Ajāta'śatru* in a procession being watched from the balcony of many storeyed palacial buildings supported on octogonal pillar's with animal-capitals. In our view this represents the actual situation in Rājagṛha in the time of the Buddha as wooden construction and ornamentation is obvious and the devoted artists would certainly be trying to imitate on stone the apt design in wood-craft. Such examples about Vaiśalī and Campā, Kapilavastu and Srāvastī strengthen the natural assumption. As a matter of fact classical writers tell us about hypostyles not only of Egypt, but also of India and Iran, and latter of wooden columns supporting the large halls. Percy Brown remarks : "The main portions of this (Mauryan) imperial residence consisted of a series of hypoltyle halls containing pillars of wood..... Polybius (X.24 X.27.10) remarks that the columns at the court of Ecbatana under the Medians *not Persians* were of Cedar and Cypress 'all covered with silver plate'[24]. Now the colonnaded halls (hypostyle) of Candragupta Maurya must have been large, at least the royal assembly hall— Rājasabhā of Bindusāra referred to by Paṇini (2.4.23). According to tradition there were 500 members in the Rājasabhā of Bindusarā. Patañjali refers to Candragupta sabhā. In the Vedic period also we have reference to sabhā, meaning assembly of members,a nd the place – venue of the assembly (V.I. II., p.420). The term sabhāsthāṇu for the dieer, clearly indicates the permanent presence of the post or pillar of the assembly-hall. So columned hall was well in use since the vedic period *(Ibid.)*. That wood was largely used, as in the hall of Chandrgupta Maurya is known from Pāṇini as is clear from the term Kāṣṭhasabhā (4.2.23). But even for this wooden-columned palace of Chandragupta Maurya (may have been built by his earlier predecessors— the Nandas or even Udaibhadra), Brown would claim unreasonable "there are indications that India as represented by the Mauryan dynasty was beginning to look even at this early date to *more* progressive civilisation beyond its western boundries for architectural inspiration" *(Ibid.)*. But where are the indications ? If Indians in that early or even earlier age could defend their city with massive but unparallel wood-work-manship without any foreign inspiration or earlier contemporary prototype what could prevent Indian

wood-worker's genius and innovative skill and skilful design in fabricating plans for making stone-pillars and glistering sun. The childean theory of *diffusion* is practically on run now. Without imitation or inspiration, or any contact lines of development in distant civilisations may lead to similar development and encourage innovation. This has been well documented by Renefew in 'Beyond Civilisation'. There are no positive evidence of Achemanian influence on Candragupta, or even actually earlier. In our considered opinion, therefore, the *Asokan* Kumrahar-Pillared hall was a further development of the long evolving Indian tradition of halls of wooden-columns. After examining fully the various differences between Kumrahar pillar and its base and the Persepolitan columns, Gupta rightly concludes : "The pillars of the Pillared Hall at Kumrahar have absolutely nothing in common with the Persian pillars in this respect."[25]

Yes, the question of the change of medium remains to be explained. Archaeologically there is no ancient Indian monumental structure in stone which can be with any degree of certainty be dated Pre-*Aśokan*. And it is true that stone architecture in fairly developed form since long, going to the 3rd millemmium B.C. or even earlier, was well respresented in Egypt, Assur, Nineweh, Babylon, Susa and Persepolis. And there is archaeological and literary evidence to suggest that India and the West Asia even Egypt indirectly had relations with India (including Pakistan) in the 3rd and 2nd millennium B.C., and even later as Bavern Jātaka would supplement. Why there is no evidence of reaction or counter-reaction in the domain of architecture between may be more sophisticated West Asiatic Civilisations and the Harappan architecture ! Nothing at all. So why should we be led to believe on Persian influence on Mauryan architecture when there are no real evidence to support it, simply because Mauryan, India, has believed to behind the so-called more progressive Persian civilisation. This is a prior assumption, both unfair and unreasonable. Suffice it to say that there is no compelling reason to harp on this exploded theme now. If Iranian-Greek architects and masons were the builders of Chandragupta's and *Aśoka's* palaces, why nothing, even on smallest scale, is found in the north-west India, resumbling in miniature even the semblance of a stone pillared hall where the refugee artists from Persia would come first after being, if ever, uprooted by Alexander's capture and burning of Susa and Persepolis. *Aśoka* comes about more than 50 years later and he does not instantly begin building construction. So after two generations, they (the refugee masons) in absence of practice in use of building stone-thrown must have lost memory of stone architecture. Certainly there were recognisable number of foreigners in Candragupta's Pāṭaliputra as hinted by Megasthenes, but they included refusee-artists one cannot say. They certainly did nothing in that medium in the time of Candragupta as Megasthenes clearly states that buildings were made of wood, mud and bricks (mud-bricks), and no where he mentions stone as a building material in Pataliputra or India as a whole. "But that such cities as are situated on the banks of rivers or on the sea coast are built of wood for (if) they were built of brick (stone is not mentioned—author) they would not last long—so destructive are the rains, and also the rivers when they overflow their banks and innundate the plains, these cities, however, which stand on commanding situations and lofty eminences are built of brick and mud."

It is almost certain that it was *Aśoka* who got stone-palaces and halls built first, and he has many firsts to his credit. He is the first to put a stop to aggressive wars and naturally is the first to use the savings not only in propagation of Dhamma world-wide but also in building grand secular and religious buildings of more permanent material—stone—as buildings of wood were more liable to easier destruction by fire or flood. In our opinion the Brāhmī script which was first used to propagate the Dhamma he spread was invented most probably in *A'soka's* time— the letters ***a, ā, ka, ga, ja, ma*** clearly show the beginner's hand, and no inscription in India with any degree of probability even be placed before *Asoka's* time, barring of course the Harappan script. *Aśoka* also was the first to get excavated rock-cut-caves— the Barabar-Nagarjuni group of Hills – which actually were prototypes of wood-thatch Śālas and wooden facade. This change of material from mud, straw, bamboo and timber to living rocks was certainly entirely an indigenous invention in his time with no previous example to follow in the country and abroad— Magadhan scientists and artists have throughout history not only shown assimilative capacity but also originality and inventive genius. Much before *Aśoka*, in 700—600 B.C. the potters of Magadha invented N.B.P. – highly burnished ware in diverse colours with extremely thin section and metallic tinge. They had no precedent to look to; they developed ingenuously from fine grey ware and burnished black ware into this distinct delux ware with shining polish. With all this excellent background and now active encouragement of the great emperor, *Aśoka* is obvious to contemplate that the change over to stone with lustrous polish from wood could be the original idea

and desire for permanence on the part of the great *Aśoka* which Magadhan architects, designers and stone-cutters, may be with some trial and error in the field and factories, translated into brilliant actuality. It is important to bear in mind that the *Aśokan* columns of the Hall or prestanding ones are monolithic and very slightly tapering upwards unlike the Persepolitan columns. In our opinion the inspiration came from the long palm-trunks so abundant in Bihar even today and the lustrous polish of the pillar from the earliest NBP pottery still at the time the deluxe ware of Indian pottery. Like the riddle of the NBP, the technique of the polish on the stone is yet to be explained fully. What we are arguing is that *Aśokan* stone-architecture can be visualised as a march, quick and climetric march forward on the earlier lines of movement and the originality and genius of Indian artists and architects wellversed in their wood-workmanship took a long leap forward in using stone also as a medium besides mud, brick and wood, on direct encouragement and placement of all necessary resources to them. The entire conception, design and actuality on ground, of *Aśokan* Stone monuments, in our opinion was indigenous. The master potters of NBP were duplicated by master masons of lustrously polished stone monuments of *Aśoka*.

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Dr. B.P. Sinha

Ancient Indian History & Archaeology, Patna University, Patna.

On Trends in Ancient Indian History Writing

T.P. Verma

Preamble

Man's interest in the past motivated him to keep records of the past events since very early times. In the beginning these records were in the form of ballads and narrations. For quite a long period these were preserved orally; then written. In India, these traditions we know as Puranas and epics, etc. But in recent times tremendous changes are noticed in the conceptual development and other aspects of history writing. During the colonial rule India came into contact with the neo-civilised cultures of the west who were in the process of developing their own philosophies and concepts about almost everything in life. India received much from these; even upto the extent of discarding almost everything old or traditional. The concept of history writing is one among these. In the present paper we propose to deal with the trends in writing of history of ancient India since ancient times.

Three Main Streams

There are three main streams of history writings in India. The first one is to be seen in the Gathas, *Nārāsānsis*, *Ākhyānas* and *Purāṇas* etc. These are narrated in accordance to the historical concept of the ancient Indians. They did not give much importance to the exact chronology but they maintained some sequence. The purāṇas give history atleast up to the Gupta period but their records upto the Mahābhārata period was put aside by modern historian after branding as myth and only a part of the post-Mahābhārata history was accepted with several ifs and buts. After the Gupta period the work of compilation of ancient history came to stand still except sporadic attempts by historians like Kalhana and others who undertook the regional history. To use modern phraseology to the ancient Indian history writer the ancient Indian history ends with the Mahābhārata war and, the medieval period ends in the Gupta period, and after this starts the modern period.

The second stream of Indian history writing starts from the advent of the Mohammadan invaders who had their own court historians. The accounts narrated by them are mostly boastfull and some times false also. These are infested with the deep feeling of hatred and contempt to the conquered ones. But the modern historians have accepted them as infallible evidences for writing the history of medieval period.

With the advent of the Europeans started the third stream of history writing which they called subjective approach. A number of Indian historians trained by their European teachers also joined the stream. But most of the European writers on Indian history were guided by their typical "European Illusions" and imperialistic motives and thus they could not remain subjective in their approach. They presented a totally different picture of Indian history and created several myths about which we will talk a little later. But before taking up this point we wish to point out to certain anomalies which are more or

less their creation, and the historian of India, especially of ancient India, is still struggling with these problems.

Anomalies in Indian Historiography

The most glaring anomaly is to be seen on the Philosophical and idealogical plane in which putting aside the continuity of all types of traditions, including social, philosophical, academic and so on, we started writing history of India on partial and incomplete data and deriving funny conclusions. It was suggested that since the name of the river Sarasvati appears so many times and that of rivers *Gaṅgā's* and *Sarayū* only so many times in the Ṛgveda and therefore the early vedic people were less acquainted with the latter ones. Since the name of the mountain Vindhya does not appear in the Ṛgveda the early vedic people were unaware of the area south of this mountain. It was also declared that the vedic society was rural one and they were the enemy of the urban people because in the vedic texts Indra is called *purandara*, i.e. destroyer of the cities. Such funny conclusions were drawn on the basis of second-hand knowledge of the vedic literature. This view was imposed on Indian history when the remains of the Harrappan civilization were unearthed and was readily connected with the Aryan invasion theory.

The other anomaly is to be seen in the Indian archaeology which has upset the sequence of ancient Indian history, and the post-independence Indian historian has not yet been able to free himself from this. As the consequence a synchronism between the Indian literature and archaeology has become an impossible task. The new generation is still being taught about the so-called Aryan invasion of Indian from the primary stage of education. It is said that they came from the north-west and that is why we get earlier archaeological sequences in the north-west. But in this case this north-west starts from Punjab. In the eastern part, i.e. eastern UP and Bihar, the archaeology does not lead us beyond eighth century B.C. This creats a difficult situation. We know for certain that Buddha existed in the sixth century B.C. and at this time, as early Buddhist literature indicates, this area was very much developed having all sorts of relations, including trade, with other parts of the country. The people of this area were playing a leading role. This we conclude from the fact that Buddha went eastward in search of knowledge and not to the west which according our archaeology must have been a centre of religious and philosophical knowledge. That area, as archaeology indicates, was inhabited much earlier and the vedic knowledge must have had greater attraction there. There are many more such examples. Should we conclude that the whole Sanskrit and Pali literature was a conspiracy of ancient Indian academicians and pundits or vice versa ?

The third problem before ancient Indian historian is also a creation of the last days of the British empire. About forty years ago India was divided into two nations which later on split into three. But the historian of ancient Indian history is still in dilemma about certain facts. For example whether he should say that Alexander the Great invaded Pakistan and he could not even reach the borders of India? Whether he should write that Chandragupta Maurya collected an army of the Pakistanis and invaded India to establish the Mauryan empire ? Whether he should say that Chandra (gupta II) of Mehrauli pillar inscription invaded and conquered Bactria by crossing Pakistan. He has now convinced himself somewhat about Bactria and Afghanistan but is still undecided about Pakistan.

With these preliminary remarks about the problems of Indian historiography we now take up the problem of the origin and development of the concept of Indian historiograhy.

Origins of Modern Historiography

In fact the modern trend of writing history of India is "in origin almost entirely European, indeed to a large extent British. It began from the early days of European exploration and colonisation, and reached its first coherent form in the programme of research laid before the Asiatic Society of Bengal by Sir William Jones in the last decade of the eighteenth century.' Their interest in the Indian history, beside curiosity, was mainly due to two reasons.

Firstly to understand India with an objective antiquities which had become a status symbol in the drawing room of an India returned European. They also became interested in Sanskrit language because they found that quite a good number of Sanskrit Words had striking similarity with those of European languages. Inspite of their sharp intellegence and methodical discipline these Europeans were not free from prejudices. But they

preached objectivity to Indian scholars. The European scholars always tried to find the roots or origin of almost every thing in India's history and culture in the West; may it be even Iran. They would not only compare every conqueror, Samudraguta or Shivaji, with Nepoleon but also try to find European Parallels of the struggle between the Church and the royalty in Indian traditions of the Brahmanas and the Kshatriyas. Similarly the Western ideas of periodisation of history was applied to the Indian history also which was to a great extent irrelevant. The English educated scholars in India also followed their foot-steps. Without thorough knowledge of Sanskrit language (although a few of them were good scholars of Sanskrit) and Indian traditions they invented, knowingly or unknowingly, certain myths in Indian history and wrote the history of this country on their own imperialistic line of thinking. They postulated and tried to impress upon the world that India was an isolated land and only one way flow of population continued since last several millenia and hoards of people used to pour in every off and on. On this background the myth of Aryan race was invented. A linguistic interest in the beginning became huge 'Aryan Proble' getting currency in the whole world. In the beginning it was non-existent, then became doubtful, and finally, an established fact. Max Mueler, the first formulator of the Aryan theory starts by saying, "Aryans, in the scientific language, is utterly inapplicable to a race. It means language and nothing but language, and if we speak of Aryan race at all, we should know that it means no more than X + Aryan speech."[1] And after the preliminary speculations of William Jones Edward Thomas proposed the "Aryan race immigration story" at a meeting of the Royal Asiatic Society[2]. With this started the compaign of separate identity for Dravidianism by a number of scholars like Caldwell, Fr. Beschi, Rev. G.V. Pope, J. Block, Fr. Heras, to name a few. In doing this, beside the European egocentric illusion the imperialistic design of the British "to divide and rule" was also in the background. It will not be out of place to quote Arnold J. Toynbee's observations to illustrate this European Illusion :

"But apart from illusions due to the world-wide success of the Western Civilization in the material sphare, the misconception of the 'unity of history'--involving the assumption that there is only one river of civilization, our own, and that all others are either tributary to it or else lost in the desert sands-may be traced to three root: the egocentric illusion, the illusion of 'the unchanging East' and the illusion of progress as a movement that proceeds in a strait line."[3]

Regarding the typical European attitude towards the East and the Eastern civilizations his observations are worth quoting :

"When we Westerners call people 'natives' we implicitly take the cultural colour out of our preception of them. We see them as wild animals infesting the country in which we happen to come across them, as part of the local flora and funna, and not as men of like passions with ourselves."[4]

Even Karl Marx, who advocated against the imperialism and capitalism, wrote in 1853 that "England has to fulfil a double mission in India: one destructive, the other regenerating the annihilation of the old Asiatic Society, and the laying of the material foundation of Western society in Asia"[5].

Having such an attitude added with the imperialistic motives of divide and rule it is not difficult to imagine the fate of Indian history writing in the hands of European scholars (especially the British) and their Indian disciples.

The Idea of History

After having a superficial and second-hand knowledge of the purāṇas, their first reaction was that Indians had no idea or sense of history. While advancing their criticism they imposed modern ideas and concept of history on the ancients. Indian scholars also accepted this or very meekly defended as if they themselves were guilty of it. But no scholar has ever tried to see the problem in terms of idea, definition and philosophy of history. In the West there have been frequent changes and improvements in the concept of history. Questions have been raised about the definition of history. After all what is history ? Chronology ? Kings and their conquests ? Progress of the society ? Forming of civilizations ? or Coming of one civilization into contact with other civilizations ?' Many thinkers have tried to answer these in their own ways. Renier declares that 'History is the story of experience of man living in the civilized society.' This is similar to the definition of Henry Prinne who thinks that 'History is the story of deeds and achievements of men living in the societies'. The observations of Sir

Walter Ralleiy are more important who says 'The end and scope of all history is to teach us by examples of times past such wisdom as may guide our desires and actions'. Some other philosophers of history also reached to similar definitions.

Now we compare this with the definitions advanced by the ancient Indians which runs as follows .

Dharmārtha Kāmamoks'āṇām-upadeśa samanvitaṁ/

Pūṛva vṛttaṁ Kāthā'yuktaṁ-itiha'saṁ prachackshte //

Here history has been defined as the story of the past events mixed with teachings to achieve the four *puruṣā'rthas* or aims of life (i.e. spiritual, material and physical prosperity of humanlife with an ultimate and to achieve *moksa*). This is not far from the definition of Sir Walter Ralleiy to whom the history is 'to teach us by examples of times past such wisdom as may guide our desires and actions.' This appears to be reflection of the puranic definition of history. Once we accept this aim of history, which is time honoured and tested, it will not be much difficult to understand the history described in the puranas (and infact the history of all ancient civilizations) which are in the form of stories of the past events; may they be connected with the lives of great kings or sages or even common man.

Modern vs Ancient Historiography

Some modern thinkers impose the recent concept of history, developed during last few centuries in the West, and they condemn the ancients for their concepts. It will be interesting to quote from the Idia of History by R.G. Collingwood [6]

"The ancient Sumerians left behind them nothing at all that we should call history. If they had any such thing as an historical consciousness, they left no records of it. We may say that they must have had such a thing; to us, the historical consciousness is so real and so all pervasive a feature of life that we cannot see how any one can have lacked it; but whether we are right so to argue is very doubtful. If we stick to fact as revealed to us by the documents, I think we must say that the historical consciousness of 'the ancient Sumerians is what scientists call an occult entity something which the rules of scientific method provides to assert on.....'

"Four thousand years ago, then, our forerunners in civilization did not possess what we call the idea of history. This, as far as we can see, was not because they had the thing itself but had not reflected upon it. History did not exist. There existed instead something which in certain ways resembled what we call history, but this differed from what we call history in respect of every one of the four characteristics which we have identified in history as it exists today."

The observations of Collingwood about the Sumerians is also aplicable to the ancient Indians. He wants to measure the mind and thinking of the ancients with the standards fixed by himself in the twentieth century.

He calls the Sumerian idea of history a quasi-history or theocratic history. Then he comes to Herodotus and terms it humanistic history, and observes that "The events inquired into are not events in a dateless past, at the beginning of things; they are events in dated past, a certain number of years ago".[7] He forgot the time gap between the Sumerians and Herodotus. He also did not consider the time which was spent in building up such a civilization from a primitive society. After all they could not have sprung out of nothing. Very often the developing pace of the human society has been under estimated. A tremendous span of time was spent by the primitives to develop a civilization. Their philosophy of life and thinking towards society also evolved and developed during this period. Their problems were entirely different from those of the modern man. His mind was primarily engaged in inventing devices to keep the society intact and developing devices to keep the enemy away. They felt themselves more nearer to gods than the modern man. This is true to all the ancient societies; may they he Egyptian, Sumerian, Indian or Chinese. Whatever written records of these civilizations we have are of this nature. Whenever they refer to an event, which of course must have happened in the remote or near past, they would never refer to the exact date of it because of their own limitations and philosophy of thinking, Most of the ancient civilizations believed in 'cyclic' order of time 'while the modern historian believed

in "linear order of time'. Here it must be noted that the 'cyclic order of time' is time tested and adopted by all most all ancient civilizations and this concept is gaining ground in natural sciences of today also; but the "linear concept of time' is yet to be tested.

The ancient Indians also believed in the cyclic order of the universe. They observed that man's daily routine begins at the rise of the sun in the morning, reaches a crescendo in the middle of the day and ends in the darkness of the night. This process is repeated day after day. Similarly the seasons also changes in a cyclic order every year. They saw that the plants also observe this order in their germination, growth and decay. Thus evolved the philosophy of the cycle of the birth and death. By the process of generalisation the ancient Indians evolved the concept of the cycles of the *mahā'yugas* (periods) in which the universe originates, grows and decays. They have fixed chronological order for these *mahā'yugas*. Thus they related their history according to it. Although these are very high figures, and, sometimes they are supported by astronomical observations also, but the modern historian has little faith in it. Any way, thus we have some accounts of the early history of India. One does not expect that all that has come to us be accepted as it is; but at the same time it should not be rejected and dismissed as myth and imagination or an effort of conspiracy and fabrication with the history of ancient India. While attempting to write the history of ancient India, in the modern concept of the term, and with a view to follow the linear concept of time, the traditional history should thoroughly be studied and utilised because here one should not only expect the germs of the history of this country but also the history of the entire ancient world.

Had India No History ?

Very often it is said that the Indians made no history and hence they attempted none. In this regard the observations of A.A. Macdonell are worth quoting who unhasitatingly declared that 'the first impulse to the study of Sanskrit (and thereby writing India's history) was given by the practical administrative needs of our Indian possessions.'[8] He observes:

"History is one weak spot in Indian literature. It is, infact, non-existant. The total lack of the historical sense is so characteristic that the whole course of Sanskrit literature is darkened by the shadow of this defect, suffering as it does from an entire absence of exact chronology....Two reasons seem to have combined to bring about this remarkable result. In the first place, *early India wrote no history because it never made any.* The ancient Indians never went through a struggle for life, like the Greeks in the Persian and the Romans in the Punic wars, such as would have welded their tribes into a nation and developed political greatness. Secondly, the Brahmans, whose task it would naturally have been to record great deeds, had early embraced the doctrine that all action and existence are a positive evil, and could therefore have felt but little inclination to chronicle historical events." (Italics mine).

The observations of Macdonell are based on ignorance and misunderstanding of Indian mind supported by the 'European Illusion' to quote Arnold J. Toynbee. It is not true to say that 'history is one weak spot in literature'. In fact Indian literature is full with the history of ancient times. It contains not only the history of Indian people but also of the whole ancient world. But to understand it one must come out of the nation of the narrow national concepts as well as the East and West prejudices. One will have to take into consideration the wast area from the Indian subcontinent upto Iran, Iraq, Syria, Turkey and even ancient Egypt, if one really wishes to understand the contents of the *Purā'ṇas* and other Indian literature. One will also have to change his notion about India as a closed country which could be opened only from the out side and the people of India could not go out of this subcontinent and contact other peoples. One will also have to expand his horizon of chronological concept of the history and antiquity of ancient civilizations. Equipped with these three fundamental concepts the history of India, and, of the whole ancient world, can be understood and written in a better way. Macdonell's assertion that 'early India wrote no history because it never made any' is not true. The whole existence of India's culture and civilization and its survival is only due to the fact that since the very early times it came into contact with other cultures and civilizations; and, had to fight several protracted wars of life and death. These are recorded in the form of *'Devā'surasangrā'ma'*, i.e. 'wars between the Devas and the Asuras'. A nation or tribe can have a history only when it comes into contact with other nations; otherwise there can be no history of that nation or tribe. The Indian literature has long records of events of contacts and conflict with the peoples of Western Asia. In this area an

abundance of archaeological and inscriptional remains have come out,a study of which reveals that the Mittanis and Hittites of Indian origin had large kingdoms in this area and had political and matrimonial relations with the Egypt and others in the third and second millennium B.C. We will discuss this point a little later. But this was a comparatively a later phase in the Indian history and thereby that of the whole ancient world known to the Indians. The records of this very early protohistoric period are preserved in the puranic texts. We have definite records that there was a time when the people of Western Asia and India were considered of one stock, and, then they slowly built up their separate cultures and civilizations. Dāityas or Dānavas, as they were called in that early period, lived in the Western Asia and Eastern Europe. There are several words and geographical names in these parts which still retain the memory of these names. These peole were also called Asuras, perhaps because they worshipped god Asura. On the other hand the Easterners were calld Ā'dityas, the worshippers of god Sun and also the Devas. Both these stocks developed separate cultures, a vivid description of which is available in the *pura'nic* and epic literature (although wrapped in mythical expressions). They very frequently came in to conflict with each other and had to fight many fierce battles for generations. Slowly they developed permanent feeling of enemity for each other. So as so in Indian literature a "Daitya, *Dā'nava* or Asura' became a synonym for supernatural inhuman creature with curious features. Similarly in Arabic and Persian literature a 'Deva' is depicted in the same way. But, both these stocks were human beings is clear from the fact that very often they had social and matrimonial relations with each other. During their long history the Asuras developed their civilization with a leaning towards materialism while their adverseries, the Indians, evolved ways and means, based on spiritualism and mutual understanding, through which they could survive longer.

Thus India had made a history and also has a thorough record of it. But the European scholars have not given a proper understanding to it because of their pre-conceptions and prejudices. They are still in search of an Indo-European culture somewhere in Europe, or, anywhere but out side India. But there can be no doubt that to obtain a positive evidence for the Indo-European composite culture one has to search into the *pura'nic* and other Sanskrit literature.

Infact European scholars had postulated Indian sub-continent as a closed country, the doors of which could be opened only from the out and not from the inside. In other words Indians could have contacts with others only when out side invaders knocked the doors at the frontiers. Indians could not have contacts with outsiders on their own. They projected the image of India as a vacant inn where peoples from out side came and forced the original inhabitants to shift further inside from the very earliest times. They gave the name *'Ārya'* to the original inhabitants of this country and postulated that they also came here from some other place. Once again we would like to quote Macdonell here to illustrate the European view which still stands almost unchanged.

"The importance of ancient Indian literature as a whole lately consists in its originality. Naturally isolated by its gigantic mountain barriers in the north, the Indian pepinsula has ever since the Aryan invansion formed a world apart, over which a unique form of Aryan civilization rapidly spread, and has ever since prevailed. When the Greeks, towards the end of the fourth century B.C., invaded the North-West, the Indians had already fully worked out a national culture of their own, unaffected by foreign influences. And, inspite of sucessive waves of invasions and conquests by Persians, Greeks, Scythians, Muhammadans, the national development of life and literature of the Indo-European race remind practically unchecked and unmodified from without down to the era of British occupation. No other branch of Indo-European stock has experienced an isolated evolution like this. No other country except China can trace back its language and literature, its religious belief and rites, its domestic and social customs, through an uninterrupted development of more than three thousand years"[9].

Thus Macdonell, on account of his typical "European illusions', has given India the credit of evolving a separate culture, unaffected from outside world. According to him the originality of India's culture is also due to its seculusion. But it is not true. As we have already discussed above, Indians developed their culture and civilization after a long drawn struggle with the West-Asian adversaries and it was non-materialistic and spiritual in nature. Taking lessions from them Indians developped their culture on the pattern of 'unity in diversities"; and, thus regional traits were given due recognition while emphasizing some common patterns for all. This was done in a very natural way. Here lies the secret of the immortality the *amrtattva* of India's culture.

And hence we have a plea for changing the European attitude towards India and its history; and, at the same time the Indian historians also give a positive thinking before attempting to write a fresh history of India.

West Asia vs Ancient Indian History

There is another aspect of India's history which we Indian historians have been neglecting so far. The scholars in America and Europe are doing much work on the subject but on account of inaccessibility to the Sanskrit literature they are not in a position to interpret the material to write an overall history of the entire area. The inscriptions written in Hyroglyphic and Cunieform scripts, found in Egypt and Western Asia, are being read and translated by these scholars. Many new facts are emerging which point out that there was a close relation between India and these people. This opens a new chapter in the history of India and the people of Indian origin in Western Asia. There were several dynasties in this area during the third and second millennium B.C. which were of Indian origin and had influenced the political, socio-religious and economic structure of the area. From these inscriptions more than 180 names have come out which are of Indian origin. Among these were mighty kings, their vassals, princes, governors and other officials. The Mitanni kings of Washugani had their names after the heros of Rāmāyaṇa such as Shattruhana, *Daśaratha, Vaśishṭha,* etc. The famous king of the Mittanis, Mattiwaz, was the son of Tushratta (*Daśaratha*). The other kings of this dynasty are Kirta (c. 1600 B.C.) Shattruhana I, Parattaran, Shaushatara, Artatama, Shattruhana II, Tusharatta (1400 B.C.) and Mattiwaza (the famous king of the Bogaz Koi inscription of 1380 B.C.). *Daś aratha* had some family trouble and he wrote a letter to the Egyptian king Amenhotep III (vide Tele-el-Amerna tablets) that 'with the grace of my god Raman I have captured and killed my rebel brother Artashum." Here this mention of Rāman (or Rāma) as the family god of the Mittanis is very significant and shows that this Dasaratha of the Mittani dynasty cannot be equated with the hero of Rāmāyaṇa of that name as Jamna Das Akhtar has tried to suggest.? Rather it suggests that the Rāmāyaṇa hero Rama was deified and worshipped in the 1400 B.C. and hence the date of the events of the Rāmāyaṅa must go several centuries before this. This Mitanni king *Das aratha* was killed by one of his sons, perhaps, from an Egyptian queen, and his other son Mattiwaz had to take refuge somewhere else. However, he regained his kingdom later and concluded the famous treaty of Bogaz Koi in 1380 B.C. with the Hitti king Supplilulium in which the vedic deities Indra, Mitra, Varuna and Nāsatyas were evoked. Here it is acknowledged that these Nāstyas (double) can only be Vedic deity and not the Persian one because the latter is in singular.

The inscriptions from Tell-el-Amerna (in Egypt) Nuzi, Alalakh, etc. in modern Syria, Lebnan, Palestine, Turkey informs us that kings and princes of Indian origin were ruling over small or large kingdoms. They were often working for the Egyptian empire either as vassals or governors; and these epigraphs, which are now being translated, show that they defended the Asian empire of Egypt from the Jews. These *Maryanu* warriers, as they were called, were famous for their loyality and valour. There are interesting evidences to show that the royal Egyptian army, during its exploits in Asia took special measures to make them war prisoners. They were given special treatment, including education, along with their children, in Egyupt and were later appointed governors in Egyptian territories in Asia. Some of these were working as military and political advisors to the Egyptian Emperors and were enjoying considerable power. Pu-u-ra was one such advisor. Addiya, Shuwardatta, Birdiya, Widdiya, Yashadatta, Birsena, Subandhu, etc. are some such names which are mentioned in the Amerna tablets as defending Egyptian territories from the enemies.

Michael Grant says that these Indo-Aryans invented the technique of smelting iron and utilised its positive value. He observes that 'This was a mighty secret weapon comparable in its days to the Atomic Bomb". Hence it is no wonder that they were in greater demand by the Egyptian rulers. They also controlled vast territories in the form of independent kingdoms. Some evidences show that they had given Sanskrit names to some places in Western Asia. A province in the Hitti empire in Anatolia was called Purusha-Khaṇḍa. Anatolia (in Turkey) itself is spelled as *Anatalya* in some atlases which is a Sanskrit name. Similarly the island of Crete is also spelled as *Kirti.* Assyria was called *Subarta* and the river Euphratas was named *Baranun* (Varanā or Varuṇā). The ancient name of Lagash was *Autasura.*

These evidences show the influence of the Indian-origin people on the social, political and religious life of the people of West Asia. And hence the assertion of Macdonell does not hold ground in the view of the new

evidences coming up. Now the question of the so-called Aryan migration from west to east needs re-examination and the statements of the Indian literature, that some Indian tribes went to west and were degraded, be considered afresh.

The authorship of the Indus-Valley people should also be looked in the light of these evidences. Harappan seals have been found, among others, in Ur, Kish, Lagash, Umma, from the period at least of Sargon of Akkad (2371-2316 B.C.). An inscription dated in the tenth year of king Gungunum of Larsa (1932-1906 B.C.) has been found on an Harappan seal. Thus the contact bnetween India and Western Asia is well established. In the light of above discusion there can be no doubt that the Vedic people were the authors of the Harappan civilization.

New Trends in Historiography

While discussing the question of writing India's history we must consider some new trends which are now finding favour among the historians. The historian now considers the political history, mentioning the exploits and conquests of great emperors, as thing of the past and out dated. He is now focusing his attention to the social and economic history from the view point of the common man. This should be welcomed. In fact the historians have misused the names of these kings and their dynasties. Following European history w call Mauryan period, Sunga period, Kushana period, Gupta period, Sātavāhana period, etc. But such nomenclatures are not suited from the view-point of social, economic, art, literature, history etc. These aspects must get due importance.

Marxist Approach :

Some problems are coming up from the Marxist trend of writing, or better we can say, interpreting ancient Indian history. The Marxist historian believes in a definite and set trend of the development of the history of mankind. They want to fit all history in that set pattern, i.e. starting from the Primitive Communism and culminating in the State Communism. It is the outcome of a certain line of thinking in which the destiny is set and one cannot help to reach the final stage. This is one sided thinking and is not suited for the ancient history of India.

Some Welcome Trends

Another line of thinking for writing history is recently gaining ground. With the expansion of the thinking horizon of man and the contracting world one cannot keep himself aloof from his neighbours. This trend is a welcome challange to the writing history of a certain nation without referring to the adjoining regions. Man has never accepted the barriers of nationality from his very early primitive days. Thus it is being said that the days have gone of writing history of small unites of nations; now the larger areas should be taken together and the interaction of its peoples be studied in the new history. A history of ancient India or ancient Pakistan will not give the full picture. Not only this, while writing ancient history of India the whole area of Western and Central Asia be given due importance. We believe that it is in this way that we can get a better picture of the old history of mankind of this area. But at the same time small areas or localities should not be sacrificed on this account. Everylocality or small area has a distinction of its own and this should be given due importance. Thus a happy combination of micro and macro history will prove to be much more fruitful and destined to give happier results.

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Dr. T.P. Verma

Department of Ancient Indian History Culture And Arch. B.H.U., Varanasi

Chandella Land-Grants—A Review

Dr. J.N. Pandey

The Chandellas, one of the important dynasties of Northern India, ruled as an independent dynasty for a period of over four centuries (*Circa* 950-1308 AD) in *Bundelkhand*[1]. In this article an attempt has been made to examine critically the significance of land-grants issued by various kings of the dynasty from time to time. Dhaṅga (*Circa* 950-1002-3 A.D.) was the first Chandella king who issued a land-grant donating a whole village to *Bhaṭṭa Yasodhara*[2]. This practice continued upto the reign of *Hammiravarman (Circa* 1288-1308 A.D.), the last Chandella king of the dynasty[3]. The surviving Copper-Plates and other donative inscriptions of the Chandellas are only be a tiny fraction of the total once existing. These Copper-Plates may be enumerated in the Chronological order as follows:

1. *Dhaṅga* (Circa 950-1002-3 A.D.)
   (1) Nanyāurā Plate[4] 'A' of V.S. 1055=998 A.D.

2. *Devavarman (Circa* 1050-1060 A.D.)
   (1) Nanyāurā[5] Plate 'B' of V.S. 1107=1051 A.D.
   (2) Charkhāri[6] Plate of V.S. 1108=1052 A.D.

3. *Kirtivaraman(Circa* 1070-1088 A.D.)
   Ajayagaḍha[7] Rock Inscription

4. *Madanavarman (Circa* 1129-1163 A.D.)
   (1) Augasi (Nanyāurā 'C' Plate[8] of V.S. 1190=1134 A.D.
   (2) Bharata Kala Bhawan, Varanasi Plate[9] of V.S. 1192=1136 A.D.
   (3) Vāridurga Plate[10] of V.S. 1219=1162 A.D.

5. *Paramardideva (Circa* 1166-1202 A.D.)
   (1) Semra Plates[11] of V.S. 1223=1166 A.D.
   (2) Ichhawara Plates[12] of V.S. 1228=1171 A.D.
   (3) Mahoba Plates[13] of V.S. 1230=1176
   (4) Pachāra Plates[14] of V.S. 1233=1176 A.D.
   (5) Charkhāri Plates[15] of V.S. 1236=1179 A.D.
   (6) Bharata Kala Bhawan[17] Plate of V.S. 1239=1182 A.D.

   (7) Bharata Kala Bhawan[17] Plate of V.S. 1247=1191 A.D.

6. *Trailokyavaraman (Circa* 1203-1240-41 A.D.)
   (1) Gārrā Plates[18] of V.S. 1261=1205 A.D.
   (2) Tehri Plates[19] of V.S. 1264=1208 A.D.
   (3) Rewa Plates[20] of K.E. 962=1212 A.D.
   (4) Rewa Plates[21] of V.S. 1297=1240 A.D.
   (5) Rewa Plate[22] of V.S. 1298=1241 A.D.

7. *Vīravarman (Circa* 1250-1286 A.D.)
   (1) Charkhāri Plate[23] of V.S. 1311=1254 A.D.
   (2) Dahi Plate[24] of V.S. 1337=1280 A.D.

8. *Hammiravarman (Circa* 1288—1308 A.D.
   (1) Charkhāri Plate[25] of V.S. 1346=1289 A.D.

On the basis of above enumeration it may be said that the largest number of available land-grants belong to the reign of Paramardideva. Ajayagaḍha Rock Inscription of the time of Kirtivarman mentions grant of two villages,*Dugauda* and *Pipalāhikā*, respectively. From Copper Plates like the Nanyāurā Plate 'A' of Dhaṅga (V.S. 1055), Nanyāurā Plate 'B' (V.S. 1107) and Charkhāri Plates (V.S. 1108) of Vīravarman, Ajayagadha Rock Inscription of the time of Kirtivarman, Ichchawara (V.S. 1228), Charkhāri (V.S. 1236) and Bharata Kala Bhawan (V.S. 1239) Plates of Paramardideva, Gārrā (V.S. 1261), Tehri (V.S. 1264)and Rewa Copper Plates (K.E. 963 and V.S. 1297, and V.S. 1298) at the time of Trailokyavarman, Charkhārī (V.S. 1311) and Dahi (V.S. 1337) Plates of Vīravarman and Ajayagaḍha Rock Inscription of Bhojavarman and Charkhārī Plate (V.S. 1346) of Hammiravarman, We know that whole villages were donated to individual brahmins and others for religious and other purposes either by the king[26], the queen[27] or very rarely by officials and priests[28]. Pamardideva was the only Chandella king who granted a whole village in favour of a number of donees only once during his reign. The Semrā Plates dated V.S. 1223 = 1166 A.D. records gifts of land, measured in *pada* (Padamekam, Padardham, and padadvayam etc.) to 305 brāhmaṇas of renowned *gotras, pravaras* and *Veda-Śakhās.* It was issued from the king's camp at *Sonāsara* on Thursday, the 7th day of the bright fortnight of Vaiśākha in V.S. 1223 = 1166 A.D. in confirmation of the grants earlier made by paternal grandfather, Madanavarman from his Vāridurga Camp[29] in V.S. 1219 = 1162 A.D.

Land was granted to learned brahmins for religious purposes and to high officers for their singular services. Chandella rulers encouraged learned brahmins to settle within their territory. The land-grants are also significant for the study of social history of Bundelkhanda. In land-grants brahmins are generally mentioned with their *gotras, pavaras* and *śakhās*. The *gotras most often mentioned are Bhāradvāja, Vasishtha, Kaśyapa* and *Krishnātreya*[30]. *In Chandella land-grants the brahmins are often mentioned as Paṇḍiṭa, Thākura* and *Bhaṭṭa, etc.*[31] *The Brāhmaṇa donees usually came from Agraharās often called Bhaṭṭāgrahāras* or *Bhaṭṭagrāmas*. These Brāhmaṇas were invited into Bundelkhand from different parts of the country, particularly from eastern India. Most of the donees studied *Yajurveda* and *Rigveda* and their *Śākhās. Atharvaveda* was probably not very popular. Charkhāri Plate of Devavarman (1050-1060 A.D.) V.S. 1108—1052 A.D. states that *Paṇdita Kikkaṇa* of *Krishṇātreya gotra* "was ever ready to expound the *Vedas*, the *Vedāṇgas, Itihāsa*, the *Purāṇas* and *Mimāmsa* and was devoted to *Sat-karma*[33]". Besides, the services of the brahmins were utilized in the administration as *Senāpatis* and *Dharmādhikārin*[34]. *It may not be out of place to mention that Bagheri*[35] Stone inscription at the time of Paramardin gives the genealogy of a brahmin family whose members served as officers of the Chandella kings for five generations.

In recognition of meritorious military services grants of land were used to be made by the Chandella kings in favour of the incumbents. *Senāpati Madanapāla Sarman*, evidently a brahmin, received the grant of a village, as recorded in the *Pachār Plate* of the time of Paramardideva[36]. The Dahi Plate refers to one Mallaya as a distinguished soldier being rewarded by land grant[37]. Ajayagaḍha Rock Inscription of the time of Kirti[38] Varman and another Ajayagaḍha Rock Inscription of the time of Bhoja Varman[39] mention a family of *Vāstavya Kāyāsthas* who held high and responsible offices under successive Chandella kings from Gaṇḍa (Circa 1008-1017 A.D.) to Bhojavarman)Circa 1286-1288 A.D.) for a period of about 280 years. Thakkura Jajuka of this family, who was appointed by king Ganda to superintend all the affairs of the State *(Sarvvādhi kāra karaneshu Sadā niyuktah)*, received the gift of a prosperous village, named *Dugauḍā* from the king. This village may be identified with village, named *Dugawān* situated in Naraini Tehsil of Banda District (U.P.). For his distinctive services to Kirtivarman *Maheśvara* son of *Jājuka* was made the *Visiśha* of Kālānjara fort and was awarded the beautiful village named *Pipalāhikā*. This village may be identified with village *Piparahari* in Naraini tehsil of Banda district, not very far from Kālānjara fort, only about 10 km to the north of Kālānjara as the crow files. For singular service rendered by vase or Vāseha, the elder brother of *Ananda*, was appointed the *Viśisha* If *Jayadurga*, Ajayagaḍha fort *(Durge Jayākhye Viśishadhikare)* along with grant of the village of Varabhavarī by king *Trailokyavarman*[40] Circa 1203-1240-41 A.D.). We learn from the Gārrā plates V.S. 1261=1205 A.D. that in the battle at *Kakadadaha* with the *Turushkas* Rauta Pāpe laid down his life. *Kadohāgrāma* in the *Pāṇīuli Visheya* and *Lohāsihāni-grāma* in the *Vikraunī Vishaya* were granted by Trailokyavarman as *Mrityukavritti* to Rautā Sāmanta, son of Rauta Pāpe, for the maintenance of the family of the deceased warrior[41]

(Kekadadaha Turushka Yuddhe mrita Ra. Pāpe Putrasya Sāmanta namne Prasādena Mrityukavrittau Sāsana Pradattaiti). Charkhāri plate of V.S. 1311=1254 A.D. of Viravarman records the grant of a village to one Rauta *Abhi* for a deed of valour in the battle of Sondhi[42] (Sondhī Satṅgrama ....Kritī *Viryātiśaya Prasāde).* Sondhī has been identified by Rai Bahadur Hira Lal with Seondhā fort, now called *Kanahargarh* on the bank of Sindha river in Datia District of Madhya Pradesh. No record of ViraVarman has been found in Datia district. Sondhī may be identified with *Sinhondāfort* (Lat. 25°27'N and Long. 88°24'E) situated in the Naraini tahsil of Banda district of Uttar Pradesh. It is close to the revines of the Ken river. Dahi plate of V.S. 1337=1280 A.D. refers to one *Mallaya* as a distinguished soldier being rewarded with gift of a village named Dahi by king Vīravarman[43].

Rewa plate (I.E. 96=1212 A.D.) is a deed of mortgage (Vittabandha) for the village *Alira* in *Dhovahatta Pattana* of the Dhanavāhī Pattala, which was pledged by the Saiva teacher *Sāntiśiva,* son of *Rājaguru Vāmaśiva,* to *Rāṇaka* Dhareka of the *Vatsagotra* on Sam. 963 *Jyeshtha Sudi 7 Soma Dine*[44].

From the study of Chandella land-grants it appears that villages granted to officers were prosperous and were most probably situated in fertile areas[45]. On the other hand, most of the villages and lands donated to Brāhmaṇas lay in the mountainous region or in the wasteland areas[46]. *Sāra, Ūshara, nimna, unnata, sthāvara, jaṅgama sthala, gartta* and *Pāshāna* are some of words found in the land grants to describe different types of land. Bharata Kala Bhawan plates of Madanavarman, V.S. 1192=1136 A.D. are of great significance, as they reveal for the first time the names of a number of villages hitherto unknown and seems to shed some new light on the types of land generally granted to the brahmins[47]. The villages mentioned in the Bharata Kala Bhawan Plates (V.S. 1192=1136 A.D.) are: (1) *Valàhāudāgrāma in Mahisiṇēha Pattalā,* (2) *Pipalahā* in *Tiṅtirī pattalā,* (3) *Vasāuhā* in *Kolava pattala,* (4) *Gaula* in *Vāndīuri pattalā,* (5) *Dadarī in Navaratha pattalā,* (6) *Denavāda* in *Mahisiṇēhā pattalā,* (7) *Astavāla* in *Erachchha pattalā,* (8) *Davaha* or *Daveha* in *Naṅdavana* (or *Nandaveṇa*) pattalā and (9) *Mahuali* in Kolava Pattalā[48].

Vulahaudā grāma remainds me of Badausa (Lat. 25°14'N and 80° 43'E) on *Bagain* river, situated in Naraini tahsil of Banda district in Uttar Pradesh. Mahisinēhā pattala may be identified with *Mahotā. Tintiri pattalā, Vāndiurī* may tentatively be identified with the Banda district of Uttar Pradesh and the *Teonthara* tahsil of Rewa district of Madhya Pradesh, *Dadari* in *Navaratha Pattalā* was not situated on the river Yamuna as D.C. Sircar,the learned editor of Kala Bhawan Plates, thought it to be. It may rather be identified with *Dadari-kā-pāthā* laying between Lat. 25°13N and 81°24'E, amidst broken rockey jungle in Banda district. The *Pattalā* of *Nandavana* or *Nandavena* is mentioneded in the Ichchhāwar Plate If Paramardin as *Nandavana-Vishaya* which may be identified with the district round ichchhāwar in Banda tahsil of Banda district. *Erachchhā-pattalā* may be the same as the *Erachhā Vishaya* of the Mahoba Plate, the name of which has been preserved in the modern *Erich* on the Betwa, about 96 km from Mahoba.

As a result of land-grants to *Brāhmaṇas* and officials, forces of decentralization emerged. All this gave rise to some typical features of feudal land system in Bundelkhand under the Chandellas. But certain good results also came out. The land donation to Brāhmaṇas led to the introduction of Vedic learning. New Areas were brought under cultivation, and cultivation probably improved with the introduction of cash-crops in some areas. Most of the land-grants are remarkable for the concrete details and data they contain, regarding land-transactions and the light they throw upon the fiscal conditions. The fiscal and other exemptions and immunities are especially recorded in the Chandella land grants. In most of the Chandella Copper Plates, the same general conditions are repeated again and again. Most of the Charters of Madanavarma were drafted by *Dharma-Lehhin śudha,* who belonged to the Vāstavya community. Augāsī (V.S. 1190) and Bharata Kala Bhawan Plates (V.S. 1192) were drafted by Śūdha[49]. *Prithvīdhara,* who was an expert in drafting long and complex documents and revalidating of former grants, wrote the Semra Plates (V.S. 1223=1166 A.D.), *Ichchhāwar Plates* (V.S. 1228=1171 A.D.) and *Mahoba Plates* (V.S. 1230=1173 A.D.) of Paramardin[50]. *Pachār Plate* (V.S. 1233=1176 A.D.) and *Charkhari Plates (V.S. 1236*=1179 A.D.) were written by *Subhānanda* of the Vāstavya family[51]. *Dharmalekhin Thakkur Vishnuka* was the writer of Bharata Kala Bhawan Plate (V.S. 1239=1182 A.D.) of Parmardin[52]. Most If the Copper Plate Grants were utilized by latter writers with slight modifications[53]. In almost all the land-grants sugar-cane, cotton and hemp are the only crops which have been mentioned. It is really very surprising that cultivation of

barley, wheat and millets are not mentioned at all. Most of the scholars have taken it for granted that these were cash-crops being cultivated by farmers under the Chandellas.

I want to cite only one example of Chandella Land Grant in order to make my point more explicit simply because all these plates have close resemblance in respect of style. Bharata Kala Bhawan plates of Madanavarman V.S. 1192=1136 A.D. read[54] = "Be it known to Brāhmanas and other leading people of the village including officials agriculturists, scribes, messengers, physicians, *Mahattaras* (heads of villages), *medas* and *chaṇḍalas* of *Valahaudā-grāma in the Mahisiṅēha pattalā* when the king (Madanavarman) was stationed at Parēyīgrāma that the above mentioned village is to be enjoyed with the water and land *(Sa-jala-sthale)*, movables and immovables *(Sa-sthāvara-jangame)* within boundaries *(Sva-Simāvachchhinne)*, .:.......*past, future and present profits. it is not to be entered by irregular soldiers and others (Pratishiddha Chātādi-Pravēśe).*

The villagers were asked to pay the customary taxes and other dues (payable to the king) to the donee and render him all obedience: "Royal share of the produce or regular land tax *(Bhāga)*, periodical supplies of seasonal produce (Bhoga), tax on cattle *(pāśu)* king's share of certain crops paid in cash *(hiraṇya)*, periodical tax *(kara)*, and tolls and customs etc. (Śulkā adi) .... land has been donated along with the temple and mansion (Sa-mandira-prākāraiṇ), ... with plants and trees, such as sugar-cane *(ikshu)*, cotton *(Karpāsa)*, flowers *(kusumbha)*, hemp *(saṇa)*, mango *(āmra)*, mahua trees etc. *(madhūkādi)* .... with forests *(Sa-Vana)*, with mines and quarries *(Sa-Khani-nidhānam)* with iron and salt *(sa-loha-lavaṇa)*, grasses and leaves etc. *(triṇa parnādyākarām)*, with ponds, tanks, rivers and mountains *(sa-tall-tadāga-nadī parvvatarn)*, with hallow, cross roads *(sa-gartta chatvarōsharam)*, with wood, bricks and stones *(sa-kāshta-shtakā-pāshānaṁ)*, with pasture land *(sa-gōkulaṁ), with artisans, ploughmen and merchants (saa-karu-karshaka-vanig-vastavyaṁ), with wild animals, deer and birds, aquatic or otherwise and other objects within the boundaries (Śa-pāsu-mriga-vihangam-jalacharam-aparair-epi simān-targgatairvvastubhih sahitam)......* No hinderance should be caused by any one to the donee who may cultivate it himself or get it cultivated, make gift, transfer or sale *(karshatam, -karshāyātam, dānādhāna vikrayam-va-kuruvātaṃ na kenachita-kāchita-vādhā karttavya)*, ... together with the order that government officers in charge of forests and wild tribes *(rājā-rājapurush atavika)*, irregular troops, etc. *(chāṭādibhih)* have to give up their privilege of exactions *(svaṃ-svaṃ abhāvyaṃ pariharttavyaṃ)*...... this grant should not be resumed or confiscated *(idam cha-asmad-danaṃ anachchhedyaṃ = anāharyaṃ cha = eti)* (but) it should be assented to by future kings" *(bhāvibhirāpi bhūmipālaih pālaniyaṃ = iti)*.

It may be pointed out that the order was in respect of the grant of 2¼ *padas* out lf 8 *padas* of cultivated land in the *Valahavdā-grāma* which was made by king Madanavarman on Tuesday, *Chaitra-Vadi*, 5 *Vishuva-sankrānti* in V.S. 1192 = 24th March 1136 A.D. from its camp at *Parayi-grāma*. Obviously it was a small piece of land which was donated but the draft was identical to that of a grant of a whole village. The land-grants were drafted in the conventional style with little regard to actual conditions.

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Dr. J.N. Pandey

Department of Ancient History,
Culture & Archaeology,
University of Allahabad..

Metallorgraphic Studies of Iron Implements and Weapon From Soron 600 B.C. - 100 A.D., Uttar Pradesh

Hari Narain, A.K. Srivastava, Jai Prakash,
I.K. Bhatnagar and O.P. Agrawal

The Village Soron[1] (Lat 20° 15'N, 78° 15'E) lies 25 km north-east of Gwalior (Distt. Gwalior, Madhya Pradesh) and is situated on a 15 metre high mound on the right bank of the Morar river. Atranjikhera[2,3] an another early iron age site lies just about 25 km to its south. The mound measures 500 metres from north to south and 250 metre from east to west. The three sessions of excavations 1979 to 1984 conducted by the staff of Department of Ancient Indian History, Culture and Archaeology, Jiwaji University, Gwalior, under the direction of Dr R.N. Mishra[4], yielded significant structures, antiquities and pottery and a sequence of cultures in which the oldest date is 2700 years in antiquity. The total cultural sequence of the site is divisible into the following phases :

Period IA (800 B.C. - 600 B.C.)

This period revealed Burnished grey ware, Black slipped ware, Grey ware and micaceous grey ware. Other important antiquities include terracotta toy and weight. Pottery of this period was made of wall levigated clay and has metallic sound.

Period IB

The red ware represents the prominent ceramic industry of this period; other finding are Grey ware, Black slipped ware, micaceous grey. Black and red ware occur in this period in a reduced quantity as compared to the IA period. Evidence of post holes indicates hut dwelling in this period. Important antiquities include iron nails and pieces of teracotta beads.

Period II A (600 B.C. - 300 B.C.)

The period is represented by Red ware, and post holes indicating hut dwelling. Antiquities other than metal include, terracotta animal figurines, beads of semiprecious stones of chalcedony, agate and carnellian and stone weights. Iron antiquities include axes, nails, and small pieces.

Period IIB

Red ware continues during this period. Grey ware made its appearance now for the first time. Grey ware offered certain general shapes like, storage jars, handi and bowls. Pottery indicate this was made on slow wheel. Deposit of this period yielded plenty of antiquities, consisting terracotta bangles, beads, balls, animal figurines of terracotta were made superior then those in preceeding period. Iron antiquities include small pieces and nails.

Period IIIA (300 B.C. - 100 B.C.)

The pottery of this period consists of a few sherds of Northern Black Polished ware and the associated red ware. Among the terracotta objects were bangles, games men, weights, beads, dabbers, balls and flesh rubbers, animal figurines such as ram, bull, and human figurines include Yakshi and brick structures. The dposit also yielded stone weights and muller and beads of semi-precious stones such as agate, carnallian, crystal and chalcedony. Hand made bricks were also found in the deposits of this period. Copper antiquities include mainly nails, a ring, a sickle (or knife), coins and some un-identified pieces. The artifacts of iron consist of nails, spear and slags.

Period III B (100 B.C. – 300 A.D.)

Marked by Red ware and comparatively inferior brick structures.

Period IV A, (400 A.D. – 900 A.D.)

The ceramic industry of this period consisted of Red ware of medium fabric. Pottery was mainly wheel turned and hand made. The common shapes of the pottery are bowls, inkpot type vessel, jars,vase, lid cum-bowl, button knobbed bowl, lid basins and spouts.Some specimen of this period had shapes and design comparable to those found at Kausambi and Hastinapur.

Period IV B (900—1800 A.D.) : Medieval Ware

Important antiquities of this period consist of iron and copper artifacts, terracotta human and animal figurines, bowls, balls, wheels and flesh rubbers, bangles of ivory and bone and semi-precious beads.

All the explorations from 1979-84 revealed that the cultural development here seem to have reached a high water mark during the period II and III, which have yielded evidence of early historical urbanisation in the regions as indicated by (a) increased agricultural production (b) brick-built houses where the size of bricks was 47x23x7 cm. and brick structures (c) rise of different crafts like weaving, pottery making, bricks laying, metal work and iron smithery (d) rise of trade and (e) monetised economy.

Ten artifacts from this site were received in National Research Laboratory for Conservation of Cultural Property, for their preservation and conducting metallographic and metallurgical studies. The four artifacts which were good in shape and appear to be very sound were selected for metallographic studies.

The artifacts comprising two axes lab. No. Fe 188, 187 and knife lab No. Fe 189 and a spearhead lab No. Fe 190 Pl. 1, Table I were examined with the following main objectives.

(i) To know their fabrication technique.

(ii) To know the development in iron metallurgy in ancient Gwalior and nearby vicinity.

Table I

Details of iron artifacts subjected to metallographical studies from Sooron an early iron age site in India.

No.	Artifact	Lab No.	Archaeological date	length mm	Breadth mm	Thickness mm	Weight mm	Section size mm
	Implement							
I.	Axe	Fe 188	600—450 B.C.	80	60	14	109.0	4x5
II.	—do—	Fe 187	100 B.C.—100 A.D.	150	28	26	355.0	4x6
III.	Knife	Fe 189	100 B.C.—100 A.D.	113	88	12	50.15	3x5
2.	*Weapon*							
I.	Spear	Fe 190	300 B.C.—200 B.C.	191	14	12	125.0	3x5

2.0 Metallographic Examination

Visual examination revealed that all the artifacts were coated with a very hard layer of rust but were in good state of preservation. Very small wedge shaped section were drawn after preliminary mechanical cleaning from the cutting edge (working surface) of the implements and (weapons (Pl. 1). The depth of these cuts were not more than 8 mm. After sectioning it was revealed that three artifacts comprising an axe lab No. Fe. 188, a knife lab No. F. 189 and a spear lab No. Fe. 190, were completely mineralized (totally corroded) but having some residual metal near the core, whereas good amount of metal core was present in axe lab No. 187. All these cut section were embedded separately in thermoplastic resin and were prepared by following the standard procedures. Etching was done with 2% and 5% Nital solution for 15—30 sec. Microstructure was clearly visible in the residual metal; but the detection of relic carbide[5,8] in the completely mineralized metal was a tedious job, however, the examination at 50 X and 1000 X helped in locating the relic carbide (relic pearlite) structure, Table II, which also helped in understanding the fabrication technique adopted by ancient smith.

The photomicrograph of the examined areas were taken on cut film size 8.1 x 10.6 cm. and speed 125 ASA.

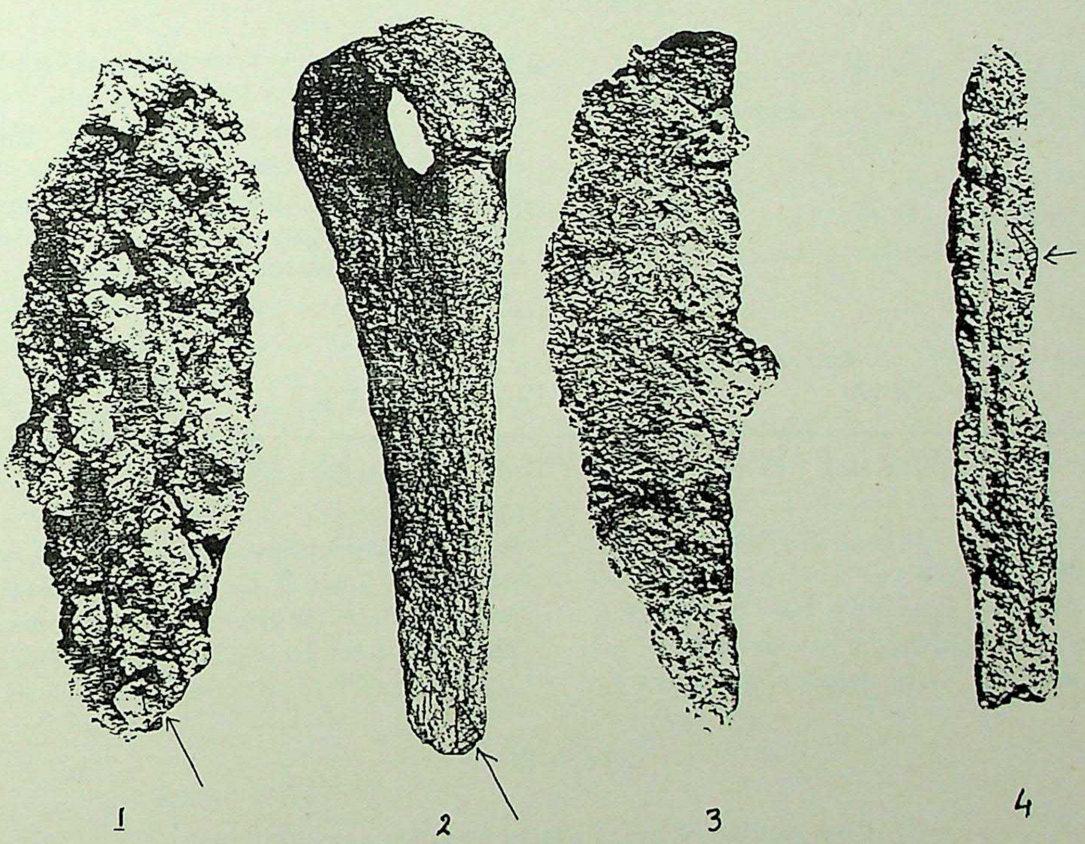


Figure 1. Appearance of the four artifacts after removal of the metallographic samples.

The microhardness of the surviving metal was determined in the scale of vickers pyramid by Leitz Automatic Microhardness tester. The equipment was standardized with 100g load and the standardisation of the equipment was rechecked by identing on the standard steel plate of hardness HV 746, Table II.

The carbon content was estimated by reading microstructure, Table II.

Table II

Microstructure, Carbon content and Hardness of iron artifacts from sooron

No.	Artifact	Lab No.	Microstructure	Carbon % (Metallographic estimation) un carburized area	Carbon % (Metallographic estimation) Carburized area	Hardness 100 gm H.V. un carburized area	Hardness 100 gm H.V. carburized area
1.	*Implement*						
I.	Axe	Fe 188	F/P(M)	0.05	0.3-0.4	100	180
II.	—do—	Fe 187	F/P(ME)	—	0.5-0.6	—	200-210
III.	Knife	Fe 189	F/P(ME)	0.05	0.2-0.3 0.5-0.6	195	150-200
2.	*Weapon*						
I. n		Fe 190	F/P	0.05	0.2-03	180	230

F = Ferrite M = Mild Steel P = Pearlite VM = Very mild steel ME = Mdeium Steel

Very minute quantity of the sample was drawn from axe lab No. Fe. 187 by drilling with 0.5 mm dia, tungsten carbide drill from the area which have exposed the residual metal after sampling by low speed saw. The sample was subjected to quantitative estimation by Atomic Absorption Spectrometer[9]. The results are being recorded in Table III. No sample was drawn from the residual metal in the other three artifacts axe lab No. Fe 188, knife lab No. Fe 189, and spear lab No. Fe 190 as it was not possible to draw the uncontaminated sample.

Table III

Composition of iron artifacts from Sooron (U.P.)

S.N.	Artifact	Lab No.	Composition % Sio2	Al2O3	CaO	MgO	Mn	Ti	Ni	Cu	Cr
1.	Axe	Fe 187	0.58	0.45	0.32	0.18	0.01	Tr	0.04	Tr	......

Tr = Trace only
= Not reported by analyst

3.0 Interpretation of Microstructure

3.1 Implements

3.1.1. Axe, Lab No. Fe 188 (600 – 450 B.C.)

A completed specimen of an axe broad and flat body, rectangular section, but end convex, working edge bevelled sharp and convex and totally corroded measures 88 mm in length, 60 mm in breadth, 14 mm in thickness and weight of the artifact was 109.0 gms. [Pl. 1(I)].

A wedge shaped section of size 4 mm x 5 mm was drawn from the pointed end. Figure 1.1. Optical examination revealed some residual metal still intact near the core and the rest of the portion was completely mineralized. The residual metal and mineralized metal contains elongated slag filaments at some places. The metal is an exceedingly pure base wrought iron with a very low carbon content in the inner side and the outer portion of the residual metal, however, is having higher carbon content (hypotectoid steel) Pl. 2.. This indicated that the axe was heated in acharcoal hearth and during this repeated heating and forging operation it absorbed some carbon content near the periphery of cutting edge. This suggests that the axe was deliberately carburized and worked to a certain extent after the carburization process was complete. The pearlite is some what dispersed. Closer examination of the edge of the axe (Carburized portion) shows that no attempt has been made to hardening the axe either by cold working or tempering. The variation in the grain size of wrought iron and the dispersed pearlite indicate that the axe in the final stages of fabrication was hot forged probably around 700°C temperature.

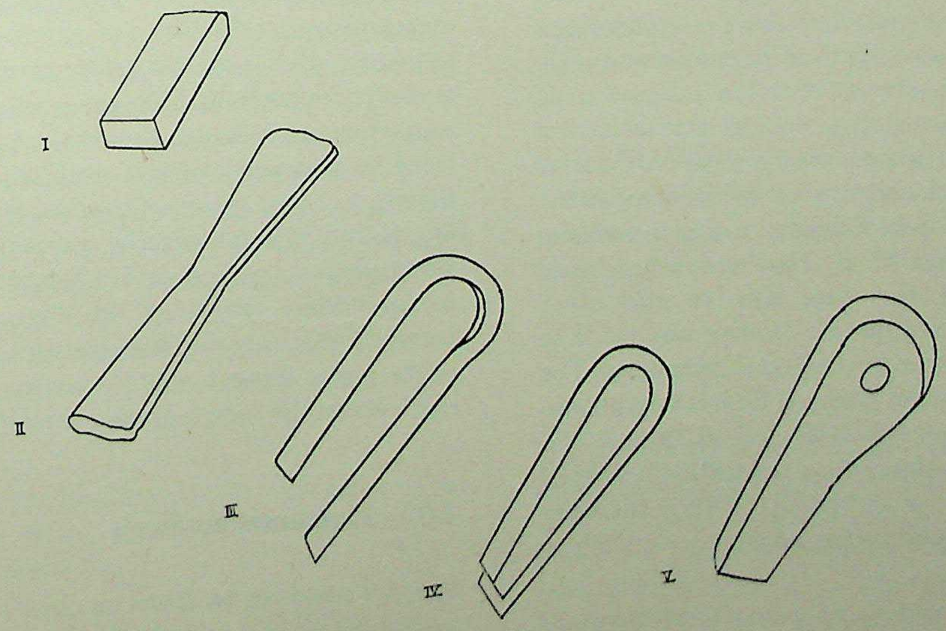
The carbon content of the remaining metal is estimated to be 0.05% in wrought iron and 0.3 – 0.4% in carburized zone, it is likely that the carbon content of the outer layers, now lost to corrosion was higher because the depth of the absorption of carbon assumes a gradient from exterier to interior according to the law of diffusion in solids.

The average hardness[10] of the wrought iron and carburized region was HV 100 and 180 respectively.

The examination of the residual metal indicate that the axe was of wrought iron which was later on deliberately case carburized and finally worked at 700°C and allowed to cool in air.

3.1.2. Axe, Lab No. Fe 187, (100 B.C. - 100 A.D.)

This artifact is a shaft hole axe in a very good state of preservation, measuring 150 mm. in length, 28 mm. in breadth, 26 mm. in thickness, the dia of the hole for putting the bamboo etc. was 14 mm. and the weight of the axe was 355.0 gm. Pl. 1.2.



Forging Step of an axe Lab No. Fe 187

A wedge shaped section of size 4 mm. x 6 mm. was drawn from the cutting edge of the axe, Figure 2.2 etched section of the sample showed that the structure consisted mainly of pearlite with ferrite streaks (Hypo entectoid steel) and few stringers or slag, Pl. 3. It was holped that the axe would show the technique of quenching and tempering but on examination it was found that such was not the case. The forging steps involved in the fabrication of the axe is shown in Figure 5. From the relative proportion of ferrite and pearlite in the microstructure the material is a medium carbon steel containing carbon content between 0.5 – 0.6%. Average microhardness near the edge of the blade varied from the 200 to 270.

This shaft hole axe was fabricated from homogeneous medium carbon steel and after imparting the shape it was rapidly cooled in air.

3.1.3. Knife, Lab No. Fe 189, 100 B.C. – 100 A.D.

The artifact shown in Pl. 1(3) is fragment of possibly a knife with the tang and slightly curved thin blade. It measures 113 mm. in length, 88 mm. in breadth, 12 mm. in thickness and its weight was 50.20 gm.

A wedge shaped section of size 3 mm. x 5 mm. Figure 1.3 from the thin cutting edge on examination indicate that the knife was totally corroded (mainly iron oxide) but was having still some residual metal near the edge and in the core. Closer examination of the section after etching showed that the knife was built from a wrought iron which later on heavily carburized on the cutting edge. Optical examination showed that the residual metal toward the core was pure base wrought iron with some rows of slag particles whereas the metal toward the edge was medium and high carbon steel having fine pearlitic structure Pl. 4 & 5. Relic Carbide[11] was also visible in the mineralized metal Pl. 6. The intermediate zone between core and the edge was of mild steel. Microstructure indicate that no attempt was made to harden the knife by quenching and tempering. The carbon content decreases gradually from cutting edge to non-cutting edge from 0.5 – 0.6%, 0.2 – 0.3% to 0.05%. The average microhardness of the residual metal was HV 150 – 200 near the edge and HV 100 – 105 in the inner side and toward the non-cutting edge.

The metallographic and micro hardness examination indicates that this knife was fabricated from wrought iron which was later on carburized but no heat treatment was given to it for improving its mechanical properties on cutting edge.

3.2 Weapon

3.2.1. Spear, Lab No. Fe 190, 300 B.C. – 200 B.C.

This spear is almost a complete specimen but in two fragments with rusted edge irregular blade having circular long tang, Pl. 1(4). It measures 191 mm., 14 mm. and 12 mm. in length, breadth and thickness respectively. The weight of the spear was 125.0 gm.

A wedge shaped section of size 3 mm. x 5 mm. from the thin and rusted cutting edge of the blade, Figure 1.4 on examination revealed that the spear was very badly corroded but still there was sufficient residual metal in the section. The microstruture consisted of small equiaxed grains of ferrite and some small grains of fine pearlite and slag cindess, Pl. 7, indicating a steel containing possibly 0.2-0.3% carbon in the carborized area. The fine pearlite indicates that this is not an equilibrium microstructure. The relic carbide structure was visible at higher magnification in some places in mineralized metal. The vickers hardness of the residual metal was HV 230. This is somewhat higher than the hardness of annealed 0.2 – 0.3% carbon steel (HV 200). The presence of fine pearlite structure indicates that the spear was probably air cooled and the absence of marteusite and tempered microstructure confirms that no attempt had been made to harden the spear by rapid quenching from the austenite temperature. The very small grain size of the microstructure indicates that the spear was probably made by hammering a rod of steel (very mild steel) into the shape of a flat spear with circular tang. The absence of preferred orientation in the grains indicates that hot hammering was carried out at a temperature above the recrytallization teperature of the steel, so that recrytallization occurred during working. The smallness of the grains suggests that the working temp was not much above the recrytallization temperature.

4.0 Elemental Analysis

Samples could not be drawn for chemical analysis from axe (lab No. Fe 188), knife (lab No. Fe. 189) and spear (lab

No. Fe 190) as these artifacts were totally corroded and it was not possible to collect their contaminated sample from the residual metal. However, the quantitative analysis[12] was made only on un-corroded metal specimen from an axe (lab No. Fe. 187), compounds and elements determined were Sio_2, Al_2O_3, Cao, Mgo, Mn, Ni, Ti, Cu & Cr (Table III).

Interpretation and Discussion

The elemental composition of an axe lab No. Fe 187 indicate that the metal used was quite pure. The iron was present as major element and Sio_2 (0.58%). Al_2O_3 (0.45%), Cao (0.32%) Mgo (0.18%) as minor, whereas manganese (0.01%), nickel (0.04%) were in very low amount. Titanium and copper were present in traces only. The presence of silica content and very less amount of nickel, manganese suggests that the metal used in this axe was extracted from its ores by direct process and not from metesic sources[13], [14].

It is evident that the smith was familar with the concept of cementation[15],[16] to increase the carbon content, which varied from 0.05 – 0.6% in these artifacts. Although higher level would have been achieved in the original edge, they would still be low compared with that in a modern cutting implement and weapon, which might range above 0.8% C. The implements and weapon were formed by conventional black smithing method that were prevalent in the Indian sub-continent since the early iron age[17],[18]. Starting material was wrought iron extracted from iron ores by smelting in furnace. The resultant metal was gives the desired shape of the artifact which was later on heated in charcoal fire (carbonaceous matter) so that carbon from the combusition gases can diffuse into the metal. The smith may have been aware that longer cementation times would give him better properties but control of constant condition (Temperature, 900-1100) over long periods was probably not feasible at that time[19],[20]. The progressive carbon gradient is typical of diffusion of carbon from the surface and it can be assumed that the original cutting edges mostly removed by corrosion, contained carbon content considerably higher than 0.6% in all these artifacts.

In the samples taken from implements and weapon there is no evidence of any attempt to harden them by quenching and tempering.

The metallographic examination carried out in this laboratory on artifacts: from Atranjikhera (1100-1000 B.C., 600 B.C.-300 A.D.[21-22] a nearby early iron age site to this site indicate that the smelting of iron ore with charcoal and extracting of metaliron was known here in this region around 1000 B.C.[23] and later on they developed their iron technology and able to produce good quality steel (medium and high carbon steel, 0.8 – 0.5 to 0.05% C) around 600 B.C. Similarly the examinations of completely mineralized implements and domestic use articles from Allahapur 400 - 300 B.C. (One of the early iron age site situated near the village Surana, some 13 Kilometres west of Murad Nagar in Uttar Pradesh) lies on the left bank of Hindon a tributory of the Yamuna river)[24], [25], revealed that they were fabricated from impure wrought iron and during the forging operations some carbon particles were in advertently absorbed except in one domestic use article (nail).

The iron artifacts from Jajamau[26], [27], Hulaskhera[28], [29], Bhardwaj Ahram [30], [31], Kausambi[32], Sringverpura[39] and other near by sites in Uttar Pradesh suggest that the smith were having good knowledge of carburization, heat treatment (quenching and tempering) and lamination around 600 B.C. – 200 A.D.

6.0 Conclusion

Within the limits of our studies conducted on four artifacts comprising weapon and implements from the moun of Sooron (Dist. Gwalior) lead us to the conclusion that the art of smelting iron from its ores was quite familar to these smith 600 B.C. – 100 A.D. The art of making implements and weapon by getting carbon into wrought iron (Cementation) has been achieved by these smith but the art of improving the mechanical properties of carborized wrought iron by heat treatment (Quenching and tempering), and laminations technique was not known to these smith.

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Sri Hari Narayan; Sri A.K. Srivastava;
Sri Jai Prakash; Dr. I.K. Bhatnagar ·
Sri O.P. Agrawal
N.R.L.C., Lucknow-226 020

Conservation of Wall-Paintings at Kusum Sarovar, Govardhan

O.P. Agrawal
Usha Agrawal

Introduction

Our country has a large number of wall-paintings belonging to different periods and located in different States. Uttar Pradesh also has a fair share of these paintings. One such site of wall-paintings is the Kusum Sarovar, also called by some persons as the Kusum Van Sarovar, located at Govardhan in District Mathura.

Kusum Sarovar is a beautiful complex with a large Sarovar (pond) in the front and at the back of it are located, like a back-drop, several domed buildings. (Pl. 1). The sheer scenic beauty of the place is breathtaking. These domed buildings which in fact are *chhatries* (sepulchral tombs) of the Royal family of Bharatpur, Raja Surajmal and his three queens, Rani Kishori, Rani Lakshmi and Rani Hansia, are placed over a high platform, dominating the whole scene. The central chhatry, biggest of all, is of Raja Surajmal, flanked by three smaller chhatries of his three queens. Besides these main buildings there are smaller canopies and balconies all around.

The *kund* of Kusum Sarovar is ancient, but when was it constructed is not known with certainty. There are legends connecting it with the time of Krishna. However, this is known that Raja Vir Singh Deo, the King of Orchha, renovated it in the 17th century. Later on the Jat King of Bharatpur, Raja Surajmal conserved it in the 18th century.[1] His son Raja Jawahar Singh built the *chhatries* in memory of his father and his mothers in the last quarter of the 18th century.

Most of these *chatries* have paintings executed on their walls. The paintings depict scenes from Ramayana, Krishna-leela, *Darbar* scenes, processions, hunting scenes etc. Remanents of paintings indicate that earlier the exterior walls of some structures also had paintings on them. Today, however, the exterior paintings are almost lost; they can be seen only in some parts.

The paintings on the inner walls of the buildings are also much damaged and are in a deteriorated condition. In fact such a situation is continuing for a long time. A team was sent by one of the Authors (O.P.A.) to work at the Kusum Sarovar about ten years back when he was the Head of the National Research Laboratory for Conservation of Cultural Property. At that time the paint was flaking, there were some type of white accretions on the surface of the paintings and the plaster was detached from the wall at several places. One panel was almost hanging from the wall, so much so that it had to be transferred from the wall. It was saved in the form of a panel and is now in the custody of the UP Archaeological Organisation.

The NRLC team working under the direction of the Author (O.P.A.) cleaned the paintings, consolidated them to arrest flaking of the paint, filled the cracks at some places. The work of conservation could not be

continued beyond a certain point because of certain restraints, particularly, enough personnel to carry on the work. However, whatever was possible at that time was done, but much still remained to be done.

For some years except general maintenance much conservation work could not be done at Kusum Sarovar. With the result the condition of paintings further deteriorated. The plaster in several *chatries* got detached and was hanging precariously away from the walls. Paint was flaking almost everywhere. There was a general presence of white layer all over the paintings. In some places, the accretions were black also, which later on were confirmed to be biological growth. Alarmed by the condition of the paintings, a Special Project for their conservation was prepared jointly by the Intach Conservation Centre and the UP Archaeological Organisation. The then Director of the Organisation, Mr H.K. Narain and later the present Director, Dr Rakesh Tiwari took keen interest in the programme of conservation. A generous grant was given by the Government of Uttar Pradesh. Part of the expenditure was to be incurred by INTACH.

As a first step, a team from the Centre was deputed to examine the paintings and prepare a detailed report. As per our present policy full documentation—photographic as well graphic—is prepared before the work of conservation is started. At Kusum Van Sarovar also similar documentation was prepared. Pigment samples were collected for analysis later on conservation work was started. Preservation of paintings in the *chhatries* of Rani Lakshmi and Rani Hansia has been completed and the work is continuing in other *chattries*. Described below are the problems faced and the results of the efforts to solve them.

Paint Analysis

First important consideration about the wall-paintings is the technique of execution. It appears that at Kusum Sarovar the Rajasthani technique of painting as well as secco technique have been used. The Rajasthani technique of painting although similar to frescoe is slightly different. In frescoe the paint in which no adhesive or binding medium is mixed is applied on wet lime plaster. The pigments get bound to the plaster on account of carbonation of lime. In the Rajasthani technique the lime plaster is prepared by mixing in the slaked lime several natural products like *gur*, pulp of *bel* or paste of *urad dal*. Also after the plaster is laid on the wall, it is thoroughly burnished with an agate stone. As a result, a shine appears on the surface of the plaster. Further, an adhesive like glue or gum is also mixed with the paint. After the paint is applied it is also burnished and polished with a stone. It not only acquires a shine, it gets completely bound to the plaster.[2] In India, this technique was very popular in some parts of the country, particularly Rajasthan, hence we have given it the name of Rajasthani Technique of painting.[3]

The colours used at Kusum Sarovar are :

Red, green, yellow, brown, white, and black and their intermediate shades.

Pigments :

Analysis of the pigments was undertaken at the Institute by micro-chemical technique and it was found that the following pigments have been used at Kusum Sarovar :

Red — Red Ochre
Green — Terre Verte
Yellow — Yellow Ochre
Black — Lamp black
White — Calcium carbonate

Conservation Problems

Some major problems which were present at the *chhatries* were as follows :—

1. There was a general layer of dirt and dust over the paintings. The painting surface had already been cleaned earlier when the NRLC team worked there. The dirt present now is later redeposition. It is not surprising because the *chhatries* are open from all sides and there are no doors to protect the paintings from the dust which falls on them.

2. There were some cracks in the roof as well as in the walls which had already been repaired by the engineers of the U.P. Archaeological Organisation. It was checked during heavy monsoons that there

was no leakage or seepage of water inside the *Chhatries.*

3. In some areas the plaster had fallen resulting in lacunae. (Pl. 2).

4. In some places cracks were also present in the plaster as well as in the paint. (Pl. 3).

5. There was wide-spread flaking of the paint (Pls. 4 & 5).

6. Present on the surface of the paintings were some mud-houses of insects. These mud-houses are very hard and are not easily removable by any chemical.

7. In some chhatries the plaster was completely detached as a result the plaster was hanging loose precariously away from the walls. In fact large chunks had already fallen. (Pl. 6).

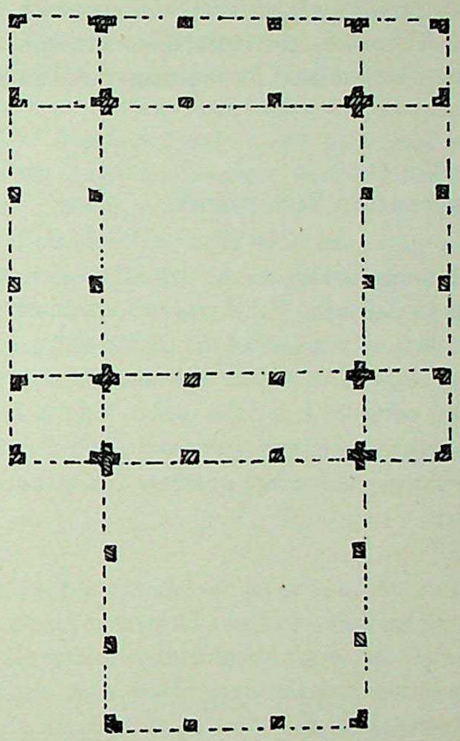

Fig. 1

To ensure that there was no further damage, it was necessary to fix back the loose plaster to the wall. If this was not done, there would have been further loss of the plaster resulting in manifold damage to the paintings. We, therefore, decided to rebind the detached plaster in all the buildngs in the first instance before any further work of cleaning, etc. was undertaken.

Thereafter, work was taken up mainly in three Chhatries namely, the *chattries* of Rani Lakshmi, Rani Hansia and Rani Kishori. The twin *chhatries of Rani Lakshmi and Rani Hansia* have a similar construction and almost similar problems of conservation.

These two chhatries are joined together (Pl. 4) and are placed on one side of the central *chhatry* of Raja Surajmal. The Rani Kishori *chhatry* is on the other side. The structure of the *chhatries* is of stone blocks joined together with lime mortar. The plaster is also of lime composition. The thickness of the plaster on the walls of the chhatries of Rani Lakshmi and Rani Hansia is not much, only about 1 cm. But the plaster on the ceiling of the dome is more, at places about 2 to 3 cm. On the other hand the plaster on the walls of the Rani Kishori Chhatry is thicker, about 2 cm.
When we examined the paintings in 1988, before the start of the Project, we noticed several special features :

1. There was flaking of paint on some walls of the Chhatry of Rani Lakshmi, particularly the walls marked 7 and 8 in the plan (Figure 1), while the paint on the other walls was found to be intact. Whatever lacunae in the paint was present had already occured earlier and was not continuing now. In other words the paint was well-fixed.

2. It was also noticed that the areas of the painting which were well-fixed were of slightly yellowish tint while other areas were not.

3. When we tried to remove the yellowish tint which was obviously on the surface of the painting, it could be easily removed with toluene.

   On the basis of these observations we came to the conclusion that the areas where the paint was well-fixed were those areas on which conservation work was done earlier by the NRLC team which worked under the Author's direction ten years back. At that time a solution of polyvinyl acetate was applied on the paintings to fix the paint to the ground.

This observation led us to another conclusion that a fixative like polyvinyl acetate worked well to fix the paint,

but with time, in as short a period as ten years, it turned to yellow. There was, therefore, a need to look for another fixative which should fix the paint but should not turn yellow.

Conservation Treatment

As mentioned earlier our first attempt was to secure the plaster to the wall. If this was not done it would have meant wide-spread loss of the plaster and consequently the paintings. The plaster was secured to the wall by injecting between it and the wall a putty of Fevicol and lime wherever the gap was much, and diluted Fevicol where the gap was minor or where only an adhesion was required.

The next step was to fill the lacunae in the plaster. For filling the lacunae we used a mixture of lime and marble powder for the rough plaster and thereafter a final coat of fine lime over it. Wide areas of loss were also filled with this plaster (Pl. 8 & 9).

The third step was the cleaning of the surface of the paintings. The yellowish tint on some walls which was attributed to the changed Polyvinylacetate was removed with toluene. While the dust and dirt was removed with a solution of ethyl alcohol and water. A mixture of 50:50 proved effective. Some other solvents were also tried but they were not effective.

Some stains particularly the water stains and the stains on account of biological growths did not yield to this solution. On these portions we decided to use the method advocated by Mora and Mora for cleaning of stone and also frescoe paintings. In this method a mixture of ammonium bicarbonate, sodium bicarbonate, a non-ionic detergent like Labolene was pepared with CMC and water. Mora and Mora have recommended to mix EDTA also, but we used EDTA only in exceptional circumstances of very tenacious stains. This paste forms like a jelly. This jelly was applied on the stains. The mixture cleaned the stains very well. However, while cleaning the surface with this mixture we faced a peculiar problem which was not totally unexpected because of the presence of water in the mixture. Some colours were bleeding in the mixture. We, therefore, blocked those areas by coating over them a 10% solution of polyvinyl acetate in toluene. This prevented the colours from bleeding even when the jelly mixture was applied on them. After the cleaning was over the Polyvinyl acetate coating which was applied to prevent the colours from running was removed with toluene. In this manner the entire surface was cleaned. Some adamant stains were left as they were.

The removal of insect mud-houses was more problematic. They are very hard and are not affected by any chemical. We, therefore, tried to remove them mechanically with a sharp scalpel. In some case we succeeded but in some they could not be removed. We have left them for the moment as they are till a better method is found. We are trying to think of a better technique.

Cracks have been filled by using a putty of lime, sand and a little of Fevicol.

Finally, reintegration of paint as done. An example of results is shown in Pl. 10 and 11.

For reintegration of paint, there are different policies prevelant in different countries. According to one policy which has been in force in our country so far, the filled areas or the flaked paint areas are left as they are. However, the Authors have always been of the belief that aesthetically the results are not very pleasing.[4] The filled areas appear as spots and blotches all over and are like scars on an otherwise beautiful painting.

According to another policy, all areas which were lost are retouched to the extent that even lost faces or figures are painted anew. We have tried to adopt a midle path of reintegration of paint. In this policy only those areas are retouched about which we are sure. For example, the facial features, like nose or mouth or eyes if lost will never be retouched. On the other hand a small loss in the design of a dress for example, will be retouched so that it reintegrates with the rest of the area.

We have tried to adopt this policy at the Kusum Sarovar. The pigments used are of a permanent nature. However, this is not the final word. The various policies of reintegration need to be discussed and debated by art historians, archaeologists and conservators to arrive at a consensus.

Future Programme

The work of conservation of wall-paintings at Kusum Sarovar is continuing. There is one room towards the north of the complex in which there are beautiful paintings but all are covered under smoke. There is hardly anything one can see. The removal of soot which is so very intense is problematic but with patience and skill it is possible to remove it without damage to the paint. A trial area has already been cleaned. It will be a question of finding out the right solution and methodology.

The Surajmal Chhatry is also having paintings on its walls. The structure of this building is rather weak and needs to be conserved before any wall-paintings conservation can be undertaken. Action has already been iniated by the U.P. Archaeological Organisation towards the conservation of the Surajmahal Chhatry. As soon as the work of structural conservation is completed, the task of conserving the painting will be undertaken.

There are paintings also in the *chhatries* which are all around the main four central *chhatries*. They are also deteriorating fast. Action will be taken to conserve them as well.

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The analytical work was done by Ms Anjana Asthana of the Intach Indian Conservation Institute. For conservation several persons worked. In the first phase, work was started by a team led by Alok Kumar. The other mambers of the team were Arvind Kumar, Shreenivasan, and G.S. Rawat. Later on a team led by Arvind Kumar, with Sreenivasan, Ashok Upadhyaya, and Arun Dikshit, conservators at the Indian Conservation Institute, as other members continued the conservation work. All of them need to be congratulated for the excellent job that they have done. photographs reproduced in this article were prepared by Ram Sagar Prasad, Photographer of ICI.

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Sri O.P. Agrawal
Director-General
Usha Agrawal
Programme Director
Indian Conservation Institute
Lucknow

A Preliminary Investigation on the Development of Suitable Gap Filling Material for the Restoration of Historic Buildings

Manju Singh,
Kamal K. Jain,
Tej Singh &
I.K. Bhatnagar.

Introduction

Mortar plays a vital role in providing strength and stability to the structure. To find out the right kind of mortar for restoration or gap filling purposes is a major problem faced by the conservators. In India, lime has been used for building purposes since very early times. The existence of many of these historical structures even today speaks volumes about the durability of these mortars and plasters as well as about the methods of their preparation. A survey of ancient literature revels that ancient Indians added various types of additives like 'Bel' pulp, Jaggery, 'Urd' dal, Curd, 'Neem' oil etc. to the lime to improve upon the property of the mortar or plaster[1]. In all probability, these additives were responsible for the remarkable stability exhibited by these structures. Unfortunately, the literature does not provide sufficient information about the exact composition and methodology of preparation of these mortars so as to reproduce them now for restoration purposes.

For quite some time, portland cement has been one of the chief materials employed for the restoration of historic buildings. This has provided many advantages but also some disadvantages. Unfortunately, it has been observed that the disadvantages are quite serious and hence, the conservators[2] all over the world have started reconsidering the use of mortars and plasters similar to those used initially. In this context, it was considered pertinent to examine the suitability of lime mortars based on ancient Indian formulations. For this purpose, six types of mortar samples were prepared in the laboratory in the first instance and some of their physical parameters were studied. This paper reports the findings of these investigations.

EXPERIMENTAL

Preparation of test specimens

For the preparation of test specimens, the lime obtained commercially was slaked in water for more than two weeks by changing the supernatant liquid every 24 hours. The lime thus obtained was sieved through a fine muslin cloth to remove the excess water, and was mixed with sand in the ratio of 1:3. To this mix wa added either 100 gm. 'Urd Dal', 25 ml. of 'Neem' oil, 100 gm. of Casein or 250 gms. of 'Bel' pulp (Table I). In order to obtain specimens of regular shape and size of 5x5x5 cms. perspex moulds were used. Reference samples with or without sand were also prepared in a similar way. Finally these samples were placed in a cabinet at 60 – 70% R.H. for more than 3 months for curing. Various types of studies were then conducted on 16 sets of 5 specimens each as follows :

Water Retention Properties

Water is the single major factor responsible for the decay of mortars and plasters. Therefore, the assessment of water retention properties of these samples can provide useful information about the durability of these samples. Hence, the following experiments were carried out.

(i) Determination of Water Absorption by Capillarity

The test samples dried to constant weight at 60 ± 2°C were placed in a glass container on thick wads of filter papers. Distilled water was poured in the container in such a way that its level does not rise above the upper level of filter papers wad, and the samples absorb water by capillarity only. At predetermined time interval the samples were taken out of the containers and their wet surface was dabbed on a damp muslin cloth so as to remove the excess water present on the surface. The samples were weighed quickly and placed back in the containers again. The weight determinations were carried out till the weight of the samples became constant. The data thus obtained are presented in Table 2. From these data the quantity of water absorbed by the samples was determined by using the expression :

$$\Delta m_i = \frac{m_i - m_o}{S}$$

Where m_i = mass of wet sample in time t_i
m_o = mass of dry sample
S = Sample surface in contact with porous support.

The average ($\overline{\Delta m_i}$) of the Δm_i values obtained at a particular time interval for all the samples of a series was calculated and plotted against $\sqrt{t(\text{sec.})}$. From the curves thus obtained the coefficients of capillary absorption for these samples were also calculated using the expression

$$C_A = \frac{\Delta m^*}{\sqrt{t^*}}$$

Where, Δm^* = asymptotic value of the quantity of water absorbed by per unit surface of sample and,

$\sqrt{t^*}$ = abscisson of the intersecting point between the line individuating the asymptotic line and the tangent to the linear part of the curve. These values are also reported in Table I.

Table 1 : Coefficients of capillary absorption, capacity of water imbibition and weathering resistance of different types of samples :

Sl. No.	Sample Type	Composition of Samples			Coefficient of capillary absorption C_A (g/cm²s²)	Capacity of water imbibition C_1	Number of cycles in which weathered
		Lime	Sand	Additive			
1.	I	1 Part	—	—	0.0290	74.911	3
2.	II	1 Part	3 Parts	—	0.0179	16.836	4
3.	III	1 Part	3 Parts	Urd dal 100 gm.	0.0220	21.107	4
4.	IV	1 Part	3 Parts	Neem Oil 25 ml.	0.0007	4.260	28
5.	V	1 Part	3 Parts	Casein 100 gm.	0.0010	5.935	19
6.	VI	1 Part	3 Parts	Bel Pulp 250 gm.	0.0125	20.499	9

(ii) Determination of Water Absorption by total immersion

For this experiment the weighed samples were placed in a large glass container on thin glass rods so as to reduce to minimum the surface of the support. The container was slowly filled with distilled water till the samples were completely submerged in water. At regular time intervals the samples were taken out of the bath using a polythene glove. The excess water on the surface of the sample and the water absorbed were determined. The measurements were carried out till the quantity of water absorbed between two consequtive weighings was of the order of >1% of the mass of the total water absorbed.

These samples saturated with water were used for determining the rate of evaporation of water and finally were dried to constant weight. The quantity of water absorption ($\Delta M/M\%$) was then calculated by using the expression—

$$(\Delta M/M)\% = \frac{M_i - M_o}{M_o \times 100}$$

Where, M_i = Mass of sample saturated with water at time t_i and,
M_o= Mass of dried sample.

The values of $(\Delta M/M)\%$ have been reported in Table 2.

Table 2 : Quantity of water absorbed ($\overline{\Delta mi}$) by capillary absorption in different types of samples

	$\overline{\Delta mi}$ of samples					
Time	**Type I**	**Type II**	**Type III**	**Type IV**	**Type V**	**Type VI**
t 15 min.	1.1569	0.3044	0.7184	0.0064	0.0054	0.4234
t 1 hour	2.0456	0.5932	1.4826	0.0138	0.0100	0.8158
t 2 hours	2.3748	0.8238	1.5040	0.0200	0.0144	1.1368
t 4 hours	2.8265	1.0840	1.5158	0.0306	0.0218	1.4757
t 8 hours	2.9032	1.2076	1.5396	0.0386	0.0284	1.6284
t 24 hours	2.9378	1.2280	1.5914	0.0760	0.0750	1.7445
t 48 hours	2.9648	1.2380	1.6674	0.0996	0.1128	1.7866
t 72 hours	2.9826	1.2440	1.6472	0.1064	0.1266	1.8093
t 96 hours	2.9960	1.2442	1.6742	0.1078	0.1266	1.8324
t 120 hours	3.0044	1.2410	1.6896	0.1114	0.1294	1.8438
t 144 hours	3.0098	1.2390	1.7204	0.1184	0.1430	1.8586
t 168 hours	3.0110	1.2418	1.7036	0.1198	0.1440	1.8648

With the help of the data available, the capacity of imbibition (C_I) was calculated as follows—

$$C_I = \frac{M_{max} - M_{of}}{M_{of}} \times 100$$

Where, M_{max} = mass of sample saturated with water at the end of experiment, and,
M_{of} = mass of sample dried at the end of experiment.

These values have also been reported in Table I.

(iii) Determination of Rate of Evaporation

For this experiment the samples used for the determination of coefficient of water absorption by total immersion were employed. These samples already saturated with water were taken out, dabbed on a wet cloth and weighed on a Sartorious type 14 balance. This weight was considered to be the initial weight. The samples were then put in a dessicator containing blue silica gel in a way that the samples are not in direct contact with silica gel. The samples were taken out at regular intervals of time, weighed and again kept inside the dessicator. From time to time the silica gel was also replaced. The rate of evaporation of water ($\Delta M/M_{of}$)% was then calculated by using the expression—

$$\Delta M/M_{of}\% = \frac{M_i - M_{of}}{M_{of}} \times 100$$

Where, M_i = mass of sample containing water,
M_{of} = mass of sample after drying at the end of the experiment.

The results have been presented in Table 3.

Table 3 : Quantity of water absorption ($\Delta M/M\%$) by total immersion in different types of samples

	($\overline{\Delta M}/M\%$)					
Time	**Type I**	**Type II**	**Type III**	**Type IV**	**Type V**	**Type VI**
t 15 min.	65.8829	7.6737	19.2522	0.4701	0.3941	0.8044
t 1 hour	71.7177	14.0120	19.5954	0.7867	0.6848	1.0867
t 2 hours	71.8763	16.1339	19.6521	0.9444	0.7955	1.2225
t 4 hours	72.0750	16.3971	19.8199	1.1485	1.0321	1.5326
t 8 hours	72.2939	16.4821	20.1346	1.4554	1.3279	1.8617
t 24 hours	73.0592	16.5200	20.5835	2.2243	2.5857	2.8184
t 48 hours	73.8900	16.6621	20.7667	2.9593	3.6006	3.8081
t 72 hours	74.0580	16.6753	20.8753	3.3617	4.2678	4.4479
t 96 hours	74.3121	16.8058	20.9706	3.5369	4.7319	5.2755
t 120 hours	74.5858	16.7051	20.9628	3.7567	5.2009	5.8401
t 144 hours	74.7905	16.7852	21.1073	4.0111	5.7323	6.4516
t 168 hours	74.9041	16.8414	21.1048	4.2209	5.9310	6.7685
t 192 hours	74.6791	16.8363	21.1073	4.2606	5.9356	6.7799

(iv) Determination of Resistance to Artificial Weathering

Resistance offered by the samples to artificial weathering is a relatively simple and direct method of assessing the durability of specimens. In this case the artificial weathering was achieved by means of sodium sulphate crystallization method. The samples were immersed in a saturated solution of sodium sulphate. The samples were allowed to remain in the solution for 24 hours followed by drying at 60 ± 2°C in a forced-air circulation oven for another 24 hours. This was considered as one cycle of artificial weathering. After drying, the samples were kept in the atmosphere for a few minutes to bring them to room temperature and were again immersed in the sodium sulphate solution. These cycles were continued till the samples were broken. The results have been presented in Table I.

(v) Determination of Water Repellancy of Samples

The property of the surface to repell water proves useful in case of mortars or plasters applied on expossed portions of the building as it will reduce the amount of water ingress and thus will reduce the extent of decay. In the present case, in the absence of any sophisticated equipment for the measurement of this property, a simple method involving the study of the shapes of the water drops formed in contact with the surface was used. Water drops were formed on the sample surface using a fine glass tube and the shapes of these drops were recorded photographically. These have been shown in Pl. 1 - 6.

RESULTS AND DISCUSSION

The relative evaluation of water retention properties of different types of samples prepared in the laboratory assumes significance in view of the fact that water is one of the major factors responsible for the decay of mortars. In historic buildings the water can reach the mortar either because of total immersion or by capillary action. From Table 2, which presents the quantity of water absorbed (Δm_i) by capillarity, it is observed that the maximum amount of water is absorbed by the samples containing only lime. The addition of a filler material i.e. sand reduces the uptake of water by about half. However, the lowest amount of water is absorbed by the samples which contain additives like 'Neem' oil and casein, whereas the presence of 'Bel' pulp was found to increase the water absorption capacity of the samples as can be seen from a comparison of data obtained for lime + sand and lime + sand + 'Bel' pulp samples. From the data, it can also be seen that the rate of absorption is high in the beginning of the experiment upto a period of 8 hours, after which the rate of absorption decreases. The data for water absorption by total immersion, reported in Table 3 also confirm that the samples containing only lime absorb the maximum quantity of water whereas those containing 'Neem' oil and casein exhibit a highly reduced tendency of absorbing water. The samples containing 'Urd' dal and 'Bel' pulp were also found to absorb water more than those containing only lime + sand. The data reported in Table 1 for the coefficients of capillary absorption (C_A) and capacity of water Imbibition (C_I), also support these observations.

Table 4 : Quantity of water evaporated from different types of samples

	(ΔM/M%)					
Time	**Type I**	**Type II**	**Type III**	**Type IV**	**Type V**	**Type VI**
t 0	48.0000	17.1574	21.0191	4.5694	8.3912	20.7550
t 2 hours	47.6490	16.9573	20.5480	4.3239	8.0532	20.3443
t 8 hours	47.1537	16.7436	20.0601	4.7059	7.7321	19.9850

Time	Type I	Type II	Type III	Type IV	Type V	Type VI
t 24 hours	46.2296	16.3886	19.2783	3.7647	7.1486	19.1756
t 48 hours	45.1213	15.9693	18.4938	3.2699	6.5392	16.7850
t 72 hours	44.0508	15.5658	17.7377	2.8140	6.0148	15.2145
t 96 hours	42.9380	15.1179	17.0125	2.3764	5.4795	13.9749
t 144 hours	41.1960	14.4272	15.9143	1.8776	4.7429	12.3275
t 192 hours	39.2553	13.4716	14.5716	1.4831	3.8275	8.3256
t 288 hours	36.5010	12.0468	12.6144	1.2573	2.7947	4.3703
t 312 hours	35.2578	11.2946	11.8479	1.1105	2.4344	3.1707
t 408 hours	31.6215	8.8450	9.5477	0.9533	1.1349	0.7062
t 480 hours	29.1510	7.1162	7.7583	0.8621	0.4939	0.2232
t 552 hours	25.5730	5.6900	6.6883	0.7086	0.1683	0.0328
t 624 hours	21.9935	4.4455	5.1800	0.6677	0.0713	0.0197
t 696 hours	16.3058	2.7740	3.3906	0.6388	0.0060	0.0087
t 816 hours	14.5463	2.2362	2.8170	0.5966	0.0010	0.0000
t 963 hours	12.9900	0.7932	2.4155	0.5531	0.0000	0.0000
t 1156 hours	10.5850	0.0000	1.7779	0.5110	0.0000	0.0000
t 1228 hours	5.6902	0.0000	0.8150	0.3696	0.0000	0.0000
t 1348 hours	3.4190	0.0000	0.0000	0.0000	0.0000	0.0000
t 1580 hours	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

On the basis of the data obtained for rate of evaporation from all the samples (Table 4) it was concluded that the rate of evaporation from all the samples except those containing 'Bel' pulp was almost similar. In case of samples containing 'Bel' pulp, the rate was found to be faster suggesting that such types of mortar can prove useful in cases where the surface gets wet quite easily so that ultimately the mortar remains wet for a smaller period, thus reducing the probability of decay.

The results of artificial weathering tests for different types of samples, reported in Table 1, clearly indicate that most

of the additives used in the present case i.e. 'Neem' oil, casein and 'Bel' pulp are able to impart same resistance to weathering. In case of 'Neem' oil the resistance is probably on account of low absorption of water in the samples because of the hydrophobic nature of oil, whereas in case of samples containing casein and 'Bel' pulp these additives are probably responsible for the increase in the adhesive forces inside the samples. However, in the present studies, the 'Urd' dal was not found to improve any property of the samples remarkably. It is very likely that it changes the property of the mortar when used in conjunction with other additives as suggested by some scholars[4] and requires further studies to reach to some definite conclusion.

An idea regarding the water repellency of various types of samples can be obtained by measuring the contact angle of the drops formed on the surface of the samples. The higher the contact angle of a particular surface, the higher will be its hydrophobic nature. In the absence of any measuring device the study of the shape of the drop was considered to be indicative of the extent of hydrophobic nature of the surface. From Pl. 1– 6, it can be inferred that the sample Nos. 1 and 5, containing only lime and lime + sand + casein do not exhibit water repellency, whereas the drops formed on the surface of the remaining samples are more or less spherical suggesting thereby a higher angle of contact. Therefore, the water repellency of these samples is definitely more than sample 1 and 5.

CONCLUSION

The results of the studies reported in this paper, though preliminary in nature, are encouraging and suggest towards the necessity of further experimentation. Further studies in this regard are continuing.

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Dr. Manju Singh, Kamal K. Jain, Tej Singh & I.K. Bhatnagar
National Research Laboratory for Conservation of Cultural Property, E-13, Aliganj Scheme, Lucknow—226 020.

Lucknow And Its Monuments

H.K. Narain

India had in the days gone by a very glorious tradition in the field of building art which underwent a considerable change under the patronage of Muslim rulers who brought with them conceptions and beliefs that were in marked contrast with those that had hitherto prevailed in India. Of course, the Muslim's influence brought about the sublime fusion of two diametrically opposite traditions, which was a kind of marvellous synthesis that was destined to engender a new style of Islamic architecture, oppositely called Indo-Islamic. The Indo-Islamic architecture developed and flourished in the North India for nearly four centuries. In course of time, it had passed through its experimental stages; many essential problems of contruction had been solved; and the suitable disposal of various components of structure had taken the final established shapes. It attained the stages of its efflorescence and consummation after the middle of the sixteenth century and developed into one of the most important architectural styles in India, designated as Mughal style. The Mughal style typifies the most important final manifestation and the most sumptuous form of the Indo-Islamic architecture.

The cultural phenomenon that, Muslims, wherever settled adopted the architecture of that country and used it in the modified form for their own religious and secular requirements, was also renoced on the Indian soil. It happened that the Indo-Islamic architecture had certain regional manifestations at various cultural centres of India. Certain factors, such as local indigenous art, aesthetic ideals of local rulers, climatic conditions, building material available and the degree of the influence exercised by the imperial style at Delhi conditioned the character of style at a particular centre. One of them is the Lucknow style which flourished during the later half of the eighteenth and the first half of the nineteenth centuries. The Lucknow style which emanated from the Mughal architecture as its last phase, eventuated when the centre of power had, however, been transferred from Delhi to Lucknow where the Nawabs of Oudh became paramount.

The Nawabs, who made Lucknow their capital seat were indefatigable builders[1] they embellished it with a large number of gorgeous and sumptuous edifices within a short space of time less than a century, so much as that few cities in India could show such a great display of the building art at Lucknow. The building art of Lucknow manifests a highly transformed form of the Mughal architecture. It displays the rococo style that may be defined as based on the contemporary productions of the Mughal, the characteristic features of which are mass, imposing conception, tawdry appearence and richness of ornamentation.

The ostentatious pretence and outward show are key-note of this architecture. In a marked manner it evidenced the passed prime phase of the Indo-Islamic architecture; it deviated from the original tradition, essential features were altered and elaborated or so

disposed that a different effect had been produced, which was not so grand like the Mughal's and less so inspiring. The reason is glaringly apparent. The qualities which are fundamental in the building art were sacrificed to elaboration and extravagently lavish ornamentation.

The Lucknow style ramified from its main stream of the Indo-Islamic architecture, when the main stream attained the highest degree of perfection, when all the pronounced structural problems were overcome, and when the sources of inspiration ceased and stagnation ensued. These conditions bleaked the prospects for further development in the architecture, the architect was left with the only alternative that was to repeat, elaborate, over-garnish and differently dispose, the architectural elements which already achieved the highest degree of perfection. The architect visualized further development by means of new building materials, he discarded the use of stone and reverted to the brick and rubble construction faced with stucco. Moreover, stone was not easily available at Lucknow and shell for preparation of the best quality of stucco was found in abundance in neighbouring regions. These new building materials enabled the Lucknow builder to produce gigantic architectural compositions with imposing appearance in a considerably shorter time and, that too, at much less cost. The Lucknow architect, infact achieved a remarkable success in manipulation of these materials, ornamental details executed skilfully, handsome floral designs carved ornately in stucco, fantastic patterns moulded gracefully in plaster, exquisite finish and superb colour effect bear the stamp of his exceptional aptitude, artistic ingenuity and marvellous technical skill.

The Lucknow architecture comprehends two periods, the first prevailed towards the end of the eighteenth century during which edifices modelled after the Mughal style were composed; it exemplified the downward course of the building art. The second phase flourished in the first half of the nineteenth century when the European leaven had penetrated into the prevailing tradition of the first phase of the Lucknow style, with the result that buildings of the hybrid style, came up

The first three Nawabs of Avadh showed no interest in the building art. The Lucknow architecture owed its evolution and its remarkable development to the forceful personality of the fourth Nawab, Asaf-ud-Daula whose building enterprises made Lucknow a city of considerable architecture splendour[2], hence an era of unparalleled architectural activity was inaugurated in Lucknow. Bara Imambara (Pl. I), Asafi Mosque (Pl. II), Rumi Darwaza (Pl. III), Bibiapur (Pl. IV), Musa Bagh, Char Bagh and Daulat Khana bear testimony to his unstinted and ásiduous patronage and building ambitions. The Bara Imambara, Asafi Mosque and Rumi Darwaza form an architectural complex remarkable for its unique volume and proportions, sumptuous character and florid order. Indeed, the conception is grand and imposing; it presents a picturesque splendour. The Imambara is the architectural glory of Oudh. It had, although, no special architectural pretensions, it fascinating lineament, its grandiose proportions and variety of its details make it magnificent. Its singly immense hall is the largest vaulted apartment of this type in the world, which is the most important architectural feature of this edifice. The Asafi Mosque is elegant in shape and enchanting in appearence, minarets are well-proportioned and graceful, but shape of the spherical domes is less inspiring; the foliated flutings and the caly ornamentation on them accentuate the floried nature of the contemporary style. The Rumi Darwaza is a magnificent gateway in the form of a splendid colossal portico that stands isolated. It consists of a vast dome cut down perpendicularly. The architect aimed at producing the most expressive architectural composition to excel the Buland Darwaza at Fatehpur Sikri, but the creation is fantastic as well as funny in taste. It manifests a work of contradictions, some features are extravagently bold whereas others frivolously petty.

The second phase of the Lucknow architecture began with prolific building activities of Saadat Ali who also beautified Lucknow in a spirit of emulating to impress others with magnificent architectural compositions. Stimulated by his zeal, he had embarked on his architectural project and he constructed Lal Baradari, Farhat Bakhsh, Terhi Kothi, Kothi Baillie Guard (Pl. V), Dilkusha (Pl. VI), Kothi Nur Bakksh, Begum Kothi, Darul Shafa and Khurshed Manzil. The accession of Saadat Ali to the throne brought about the European influence in Lucknow. As a result, a sensible change with far-reaching effect on all social and cultural pursuits took place. The art was stimulated into the European term of life and a new orientation was introduced into the building art. The incentive and stimulus that came from European sources revolutionized the whole course of building activities and a new architectural style, hybrid in character, was evolved. It presents a sumptuous form of

a mixed formation, in which, ogee arcades, slim minarets, fluted domes and foliated arabesques are combined with Italian attenuated pilasters, Roman round arches, Byzantine Corinthian capitals and Gothic triangular pediments[3]. Structures, thus constructed, consist of an original base Mughal framework garnished with European elements often of highly mixed variety. The building that illustrates this manifestation of the Lucknow architecture is bare in design, mingling western display in an oriental setting.

The mansion of constantia, now known as La Martiniere and housing of public school is a landmark in the development of the last phase of the Lucknow style. It is an edifice of immense proportions derived from Palladian style. The architect has produced a design fantastic in arrangement, the arcaded basement storey had sufficiently been elevated; the superstructure of eccentric lineament has been formed of Byzantine Orders, one superposing the other; it has a series of halls grouped internally so as to create a pleasing effect; the most impressive central tower supported by flying buttresses emerges from the succession of terraced roofs and rising to a colossal height commands the whole surrounding majestically; in order to create a subtle contrast; the crenellation is varied by figures of animals standing erect, holding on to merlons with one paw and gesticulating with the other and small kiosks have been disposed at appropriate positions to break the skyline The building is pretentious in appearance, peculiar in plan and curious in taste, nevertheless it has force, character and enchanting effect that make it striking.

This building made by Claude.Martin[4] in an admixture of styles, is of a pronounced consequence; of course it contains the germ of a fascinating design. It effected Lucknow architecture considerably. The novelties it presented, impressed and attracted the Lucknow architects so much so that they proceeded to reproduce its prominent elements in later creations, with the result that all secular edifices of Lucknow were, henceforth, constructed in this pseudo-Italian style.

The Farhat Bakhsh[5], built by Saadat Ali, presents the same peculiarity and the same picturesque irregularity, combined with mere fantastic details. Another creation of Saadat Ali is the Begum Kothi. The architect wanted to produce something spectacular by blending Italian details with the original setting. But the creation is neither a specimen of the Italian style nor an adaptation of the style to Oriental purposes. The architect made some improvement in this structural undertaking of the Oriental Italian style, but it exposes his ignorance of the principles of the European classical architecture. The transgression is apparently perceptible from the misapplication of the details of European Orders; the architect disregarded the division of entablature into architrave, frieze and cornice; the relationship between thickness and height of the Italian pillar and that between the proportion of the cornice and the climatic condition were meaningless to him; even the origin or function of the various parts of European Orders were unknown. Thus this edifice is a jumble of orders. Nevertheless a certain amount of picturesqueness that this building has, redeems its other defects to some extent.

The Oriental Italian style took a step further in its development during the time of Ghazi-ud-Din Haider who built the tomb of his father and mother, Saadat Ali and Mushirzadi[6]. These sepulchral compositions are exceptionally fine specimens of their own kind. They are most favourable examples in which the union of European ideas with the oriental setting was carried out with great success. Most of their details are of the debased Mughal style. The dome that crowns the tomb of Saadat Ali smacks of the European style (Pl. VII). In the mausoleum of Mushir-zadi, arches and pillars are curiously grouped but creating a very pleasing appearence, from which the dome emerges out elegantly (Pl. VIII).

Nasir-ud-Din Haider erected Qaisar Pasand which remarkably corresponds with Qaisar Bagh but more fantastic than it. In this pretentious building, copies Mughal arches, Moorish minarets, Hindu umbrellas, Ionic columns, Italian pediments, Gothic ballustrades, are all blended into a confusion. The Chhatar Manzil which is another creation of Nasir-ud-Din Haider is, par excellence, an uncommon example of the European display in an Oriental work. It presents a most fantastic and bizarre form with an additional taint of irregularity.

The Qaisar Bagh, that has surpassed all earlier examples was built by Wajid Ali Shah. It has a great court encompassed by two storeyed edifices; each storey is varied in design; exceedingly slim pilasters run through both storeys between which Italian windows with venetian blinds alternating with Mughal arcades of arches of no style, are devised. The parapets are crowned by battlemented crenellation copied from the Mughal style.

The halls groupped internally are beautiful in appearence. The buildings culminate in domes, the shape of which is curiously fantastic. The whole is painted with gaudy colours presenting loud appearance.

During the second phase of the Lucknow architecture when secular buildings were erected in the pseudo-Italian style, edifices of religious character were still built in the debased form of the Mughal style. Among these Lal Baradari, Jami Masjid and Hussainabad Imambara are more important. The Lal Baradari has some of the dignity of design that bears the stamps of Mughal style. The Jami Masjid, commenced by Mohammad Ali Shah and completed by his mother, Malka Jahan, is the most satisfatory specimen of the Mughal style in Lucknow. If this enormous edifice of considerable grandeur may not be rival of the Moti Masjid in Agra, it is certainly the most beautiful and magnificent structure in Lucknow. Two well proportioned and graceful minarets flank the elaborately and handsomely sculptured facade. The minarets rising to a colossal height and commanding the whole surrounding majestically impart dignity to this mosque (Pl. IX). Walls, arches and ceilings are profusely and ornately decorated with beautiful floral designs in stucco relief work painted with bright colours. Mohammed Ali also constructed Hussainabad Imambara, again copying the Mughal style. It forms with other buildings, a structural complex in which the buildings are in a style that is fantastic; the tomb of Zenab Asiya is designed on the lines of Taj Mahal at Agra but creation is the ludicreus model; the main gateway to the complex is a rich specimen of the florid style. The Imambara complex itself is not a pretentious edifice, but it is remarkable for the beauty of its details. It can rightly, be called the most beautiful jewel of Lucknow. It is decorated with floral and geometrical patterns in stucco relief work which are coloured in distemper in the glaring taste (Ph. X).

The Nawabs of Lucknow were of Persian origin and belonged to the Shia sect of Islam[7]. Owing to their origin they always looked instrinctively towards Persia for inspirations and regarded it as the fountain-head of true knowledge, it had a marked effect on many institutions of Lucknow. Moharram festivities, a distinguished religious institution of Persia, were celebrated in Lucknow as a State function on a large scale with a great pomp and show. As a meritorious act, a large number of Imambara and Karbalas were erected in Lucknow; it was a distinctive architectural tradition of this city. Karbala, which is used as a burial place of Tazias is built in a form of an enclosure. It often consists of a mosque but does not possess any architectural pretence. Whereas Imambara is an edifice, in which, Tazias are placed for show and during first ten days of Moharram, mourning ceremonies are celebrated and some other mourning functions are held in commemoration of the martyrdom of Hussain, the grandson of prophet Mohammad. Imambara is occasionally used as a mausoleum from which it does not substantially differ either in design or in construction. Not only this but a few pieces of Persia had been reproduced in Lucknow, Shah Najaf (Pl. XI), Kazmain (Pl. XII) and Dargah of Hazrat Abbas are the replicas of the tombs of Persia highly venerated by the Shia sect[8].

Mass the richness of ornamentation are main theme of the lucknow architecture, nevertheless there are several edifices whose general plan and skyline are commendable. Their inherent defect is the indifference to certain norms of architecture; they lack in correct orientation, effective lineament, structural propriety and in balance and harmony; solids and voids are not blended skilfully and components are not disposed judiciously. The architectural ideal ordains ornamentation to be inherently kept subservient to the structure but in Lucknow the structure has been made subservient to ornamentation that impairs the clarity of the monument. Notwithstanding that there are certain architectural features which make the Lucknow monuments attractive.

It is stucco that imparts a distinct character to the Lucknow architecture. It was prepared from shells obtained from lakes which dried up. Stucco in its most refined form provides more brilliant appearance than marble and the effect in light of numerous lamps is charmingly beautiful. The sumptuousness of the Lucknow buildings owes largely to the stucco plaster. Intricate involuted designs moulded in stucco plaster and the finished execution of the ornamental details in its rescue the architectural defects of the Lucknow buildings to a great extent. It is in fact the redeeming feature of the style.

One of the most important characferistic feature of the Lucknow architecture is its grand gateway designed to play an imposing entrance and a worthy pendant to a sumptuous building. It comprises arch within arch, springing up from the same base and garnished with enriched florid details which are painted with gaudy

colours. Another remarkable feature of the Lucknow buildings is the provisions of long and well-proportioned flights of steps that lead to their entrances on the lofty plinths from which the edifices spring up. These highly elevated basements lend to the buildings an additional dignity and the stately stairways wrought elegantly, provide a splended introductory approach.

A most conspicuous characteristic of the Lucknow buildings is a remarkable cronal of great beauty, that adorns almost every building crowning the parapet of the main facade. It is an architectural exuberance, notably spacious, that comprises a narrow gallery consisting of a perforated arcade of small bays and surmounted by a series of diminutive cupolas, a cupola crowning each bay. The cronal is flanked on either side by an attenuated pilaster that emerging out from the parapet rises higher than the cronal and descends to the platform below.

The Lucknow buildings generally consist of great vaulted halls, specially notable is the vault, formed in one piece, required neither thrust nor abutment, and which is more durable than the Gothic vaulting, wrought although most scientifically. The vault, which is of a simple form and construction, was made by a method of placing the mixture of a coarse concrete of the sufficient thickness on a centring of bricks and mud and leaving it for more than a year, when it was set and dry the centring was removed. The principal apartment of Asaf-ud-Daula's Imambara measuring about 50 metres in length and 17 metres in breadth as well as height, thus formed, is one of the largest hall of the world. The vaulted ceiling is coved at the sides and flat in the centre, the wall-space between the frieze and the flat cornice from which the coved ceiling springs, is moulded in involuted arabesques in stucco, the outlines of which are artistically painted in varied colours producing a very pleasing effect.

The pillar is very rare in the Lucknow buildings, because of their design and manner of their construction; its place is taken by substantial masonry pier, usually rectangular in section. Arches generally spring up from pilasters which consist of round shafts, moulded bases and moulded stalactite capitals. The arches are the finest feature of the Lucknow architecture. The Lucknow arch is lancet or two-centred, commonly known as French window. The curves of the Mughal four-centred arch required to be suplemented by tangential lines in order to meet at the crown, but the Lucknow arch is formed of simple curves struck from two centres, thus corresponding to the Gothic arch in outlines. As a matter of fact the Mughal four-centred arch developed in Lucknow, the angularity and forced ogee outlines and assumed contours of more suavity and grace. The Lucknow archways displayed, in the initial stage, the expressive low impost which, in course of time, has been converted into a form of exceedingly shapeliness. The arch, thus formed, is sharply pointed and elegantly shaped with graceful curves and contours. Semi-circular, ogee and engrailed arches are also used in the Lucknow buildings. An opening very often has at its both faces a series of arches, arch within arch arising from the same base, in varied forms and shapes in receding planes. Generally an undulating leaf creeper adorns the spaces around the outlines of cusps of an engrailed arch. The underside of arches is also embellished with floral arabesques and the apex of arches is invariably crowned by a flower guldasta. Unlike the Mughal tradition, the spandrils are left blank but sometimes they are decorated with the representation of a fish which was the state emblem of Oudh. The minarets are well-proportioned and graceful in outlines. They are lofty and slim and taper as they rise higher. The bulbous dome had become almost universal in the later phase of the Mughal architecture, but in Lucknow it lost an inward return of its curves at the point of necking hence in the absence of construction in the lower contours it has become almost spherical in shape. The dome rises out of a band of conventional petals at its base concealing the juncture with the drum. This caly ornamentation is a notable feature of the Lucknow buildings. The dome ornamented withvertical flutings culminates in inverted lotus flower crowned by a finial consisting of pots varied in shapes and holding on a crescent.

The clear story is used in the Lucknow buildings, it is combination with perforated arcade and arcaded merlons carried on the parapet, presents the form of an arcaded fenestration. The oriel window with planquin-shaped roof also appears in the Lucknow buildings, although rarely, but it is not suitably disposed. The great halls of the Lucknow buildings create a pleasing effect largely owing to the introduction at the correct height of elegantly carved and coffered ceiling.

The Lucknow buildings do not depend on their composition of lines and forms and judicious disposal of their components but largely rely on their surface treatment for which, ebullient character of stucco

ornamentation and colouristic painting were included in the scheme of decoration. The stucco ornamentation has weakened the outlines of edifices and confused their surfaces. There is much use of involuted moulded design but the leaf pattern with its variants predominantly figures in the scheme of decoration, which is a most notable feature of the Lucknow building art. The Lucknow architecture bears the impress of the Persian art and the chief characteristicof thePersian architecture was colour liberally applied on surfaces. The Lucknow builders revelled in bright colours and spirited decorative form and Lucknow workmen were also colour concious. Hence the element of colour takes a prominent role in the architectural scheme.

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Sri H.K. Narain
Superintending Archaeologist,
Archaeological Survey of India,
Lucknow Circle, Baillie Guard,
Lucknow (U.P.)

A Study of North Indian Guilds Based on Coins, Seals and Sealings

Beena Jain

A study of the economic history of ancient India clearly indicates that the economic independence gained in those times was solely due to the industrial and mercantile development in that period. The industrial and mercantile development were mainly due to the sound planning and efficient organization of the people engaged in these professions. These organizations are termed as *s'reṇi* in ancient Indian literature and epigraphs. Many other terms such as *gaṇa, vrāta, pūga, saṁgha, deśi, sārttha,* are also used in the same sense, though such instances are not very frequent. Through the instrument of guild people following a single, common profession combined their efforts and worked jointly for the wellbeing of all the members without any distinction of high or low. This, on the one hand, ensured a prosperous and comfortable life for each of its members and on the other, contributed towards the economic advancement and prosperity of the country.

Our knowledge about this ancient institution has been very vague. South Indian guilds have been much highlighted by most of the scholars, but North Indian guilds remained neglected for quite a long time. In an endeveour to go through the details of North Indian guilds we found that besides literature and epigraphs, some numismatic sources also extend their hands to fill up the gaps of our scanty knowledge about this institution. Those specimens supply us with relevant material in formulating the guild theory.

Although there is no denying the fact that it had always been the state's prerogative to issue coins, yet the importance of coined money to the mercantile class leads us to presume that the initiative in this regard was taken by the merchants themselves. On this basis, it has been speculated that the state coinage is of a later date than private coinage. Dr. V.A. Smith originated the view that silver punch marked coinage was the private issue of guilds and smiths with the permission of the ruling power[1]. But, recent excavations prompt us to adopt a different theory. The independent works of Spooner[2], Walsh[3] and Bhandarkar[4] clearly establish that the punch marked coins were the state issues of a particular region. But Smith's view cannot be completely rejected. There always remains the possibility of particular marks of guilds having escaped he notice of the scholars till today. Another possibility is that, when the state assumed the function of minting coins, earlier private issues in circulation were withdrawn to give a new impress[5].

The theory of private coinage has also been supported by the *Arthaśāstra* of Kautilya[6].

In *Arthaśāstra* it is said,

सौवर्णिकः पौरजानपदानाम् रूप्यसुवर्ण मावेसनिभिः कारयेत्।।

The translation of the passage by Dr. R. Shamsastri forms the basis of the view that corporate bodies had the right to issue coins. The translation runs: The state

goldsmith shall employ artisans to manufacture gold and silver coins from the bullion of citizens and country people. The expression *paurajānapadānaṁ* has been explained by Dr. K.P. Jaiswal are being two separate corporate bodies, one for the whole country (excepting the capital) and the other for the citizens of the capital[7]. With this explanation in view, Dr. Jaiswal opines that the state manufactured coins of corporate bodies[8]. This explanation, however, is not unanimously accepted[9]. The passage, in fact, simply mentions that the state goldsmith minted gold and silver ornaments for the public. Even so, the theory of private coinage cannot be altogether dismissed because Kautilya elsewhere states that, when false metallic pieces were paid to the state treasury by the traders and merchants they had to pay charges called *Vyaji, rupikā pārikṣika* to the treasury as penalty[10]. Therefore, it seems reasonable to suppose that traders and merchants used to make *mohurs* of some definite weight even in the time of Kautilya. After the disintegration of the *Aśokan* empire, it seems that the guilds of traders gained the freedom of issuing coins in some parts of the country as is evidenced by the archaeological finds which have brought to light some coins from various sites.

In Taxila some coins have been unearthed bearing the word *negama* on the obverse and, sometimes a name on the reverse. These coins were found among the ruins of the city represented by Bhir mound, Sirkap and Sirsukh near Ravalpindi, in Pakistan. The coins are dated late in the 3rd cent. B.C. when Taxila was under the Mauryan governor and ending with Greak conquest before the middle of the 2nd cent. B.C. These coins bear the word *Dojaka, Atakataka, Ralimasa* and *Kadare* on the reverse[11]. It is likely that these are the names of the localities where these coins were minted. Some other coins from Taxila bear the legend *'Pañcanekama'*. It seems that five traders guilds of taxila joined together to issue these coins although there is also a possibility of there being a guild called *pañcanigama*. It testifies to the existence of various guilds of traders at Taxila, powerful enough to issue coins at the time. Another class of inscribed coins from Taxila bears the legend *'hiraṇya same'*. Allan takes it to be the[12] *prākṛta* form of *hiraṇyāśrama*. Dr. K.D. Bajpai, however, takes it to mean *'hiraṇya swāmi'* i.e. the owner of the coined money and points out that these coins refer to the corporation of traders responsible for the manufacture of these coins[13]. As these happen to be the latest coins of the *negama* series, it seems reasonable to accept the explanation offered by Dr. Bajpai.

Besides these, no other *negama* coins have been found from other sites. In view of the small number of the *negama* coins and their localized nature, it has been argued that *negama* coins were non-monetary in nature[14]. But this argument can be refuted on the ground that there are some state issued coins also which are very few in number like that of the *Sātavāhana* dynasty. Regarding their localized nature, it can be anticipated that further excavation at different sites might bring out more *negama* coins. It is likely that this coinage was used between the guilds and their customers only.

Besides these *negama* coins from Taxila, some other coins from *Kauśāmbī* and *Vidiśā* have been brought to light by Dr. K.D. Bajpai[15]. Two copper coins from *Kauśāmbī* bear the legend *'gadhikānaṁ'* in Mauryan characters of 3rd-2nd cent B.C. These coins in all likelihood, allude to the guild of perfumers at *Kauśāmbi*. Another coin from *Kauśāmbi* bears the legend *'Kosāmbikānaṁ'* in the Mauryan Brāhmi characters. This suggests that the coin was issued by a corporation of traders who had their establishment in *Kauśāmbī*. A similar coin bearing a half legend *"Kānam"* has also been excavated at *Vidiśā* which perhaps belongs to a trade guild of *Vidiśā*.

These coins reveal the fact that more than one guild of a town used to issue such coins. But these coins have not been discovered from other sites. It appears that soon after the disintegration of the Mauryan empire, the guilds of traders were empowered to issue their own coins in some parts of the country. With the re-establishment of a strong and centralised government the state's preprogative to issue coins came to be firmly established. This explains why we do not find any foins issued by the guilds of later periods.

Unlike the small number and localized nature of guild coins, guild seals and sealings have been unearthed in abundance. It is an established fact that the guilds had their own insignia and emblems. For instance, the *Manusmrti* mentions that the flag was the distinctive mark of guild[16]. Similarly, the *Harivaṁsa Purāṇa* states that the guilds visited the court of Kaṁsa with their own respective flags[17]. Besides these literary evidences, a number of seals and sealings have also been discovered from various sites which belonged to the merchant guilds.

A terracotta seal die from *Bhīṭā* bears in reverse letters, the legend *'sahijitiye nigamasa'* in the Mauryan characters. Marshal dates the seal to 4th or 3rd cent. B.C. and regards it to be the earliest specimen of the *nigama* seals[18]. This seal die has been recovered from the underneath of the floor of a house which he designates as "the house of the guild" and concludes that "the house may mark the site of the office of the *nigama* or corporation". The seal die, therefore, can be taken as testifying the existance of the *nigamasabhā* as recorded in the literature.

Two other sealings bearing the legend *'nigama'* in Maurayan characters and the device of a tree within a railing have also been excavated from Hargaon and Jhūsi[19].

Sri M.M. Nagar also came across two seals from the site of *Kauśāmbī*. On one seal he deciphered the legend *'navikasa'*, sanskrita *'navikasya'*, i.e. "seal of the boatmen" in 2nd cent. B.C. characters while the other seal bears the legend *'rathikas'*, Saṅskrita *'rathikasya'* *i.e. the seal of charioteers*[20]. The guilds of boatmen and charioteers were fairly popular at that time. It thus seems reasonable to assume that these seals were issued by the respective guilds only.

From Rajghat also guild seals and sealings have been unearthed. From that site, some sealings bearing the legend *'nigamasa'* in characters of 1st cent. B.C. and some others bearing the legend *'negamasa'* or *'nigamasa'* in early kuṣāṇa characters have been recovered[21].

A square sealing in early kuṣāṇa script bears four letters *'negamasa'* written in the four corners or a square enclosure with an entrance[22]. This enclosure beyond all doubts portrays the *nigama* office. Another sealing from the same site, bears the legend 'gavayaka seniye' i.e. the guild of the milkmen and in another the legend reads, *'Vārāṇasyaranyākaśreṇi'* i.e. the seal of the guild of the forest people of Varanasi[23].

From Ujjain, as well, two sealings of the Kuṣāṇa period have been unearthed. One of the terracotta bears the legend *gosahitakasa* in the characters of 1st cent B.C.[24].

The other sealing is of ivory having a four lined legend of which only the last two lines are legible and read as *'gothajasa'* and *'tisakasa'*[25]. The first sealing perhaps refers to the guild of people rearing cattle, while the econd sealing seems to belong to a *'gostha'* a company or a guild[26].

Various *nigama* seals have also been unearthed from Bhita belonging to the kuśāṇa period. Seal No. 57, in Marshal's list bears the legend *'naigama'* while Nos. 58 and 60 have *'nigamasa'* and No. 59 bears *nigama* in the Kuṣāṇa characters[27]. Another terractotta sealing from Bhītā bears a circular legend *'sulaphalayikānaṃ'* in characters of 2nd or 1st cent. B.C. It seems to refer to the markers of the arrow heads[28].

Seals and Sealings of the Gupta period belonging to the guilds have also been recovered in plenty.

About half a dozen seals from Rajghat bear the legend either *'nigama'* or *'nigamasya'* and record the names of individuals wuch as Bharata, Śridattta and Sauryādhya who were perhaps the members of the *nigama*. These sealings bear the motif of a domed granary also[29].

From Bhīṭā also seal Nos. 61A and 62B from Marshal's list bear the legend *'nigamasya'*[30]. Another sealing bearing the legend *'kulika nigama'* was also unearthed at Bhita by Marshal[31].

A terracotta sealing of the Gupta period from Kumrahara shows a spouted vessel with a lid in the centre, a conch on the left and a serpent on the right. In the lower half occurs the legend *'tāmbolikarmasya'* meaning 'worker in betels'[32]. Perhaps it points to the guild of betel sellers. The most important evidence in this context is supplied by Basāṛh, which was the provincial headquarters under the Guptas. The abundant seals unearthed from this site bear one of the following legends.

(i) *Śreṣṭhi nigama*

(ii) *Śreṣṭhi-kulika nigama*

(iii) *Śreṣṭhi-sārthavāha prathama kulika nigama*

(iv) *Śreṣṭhi-sārtthavāha-kulika nigama*

There is one more seal unearthed by Dr. Spooner at Basāṛh bearing the legend *'Makhutali nigamasya'*[33]. It is likely that the *nigama* was named after the place. Dr.

Spooner unearthed 17 sealings bearing the legend *'śresthi nigamasya'* in the Gupta script[34]. The device on one of these seals has been described by Dr. Spooner as a hemispherical *stūpa* from the top of which project three branches which look like a *kalaśa*. These seals also bear additional impressions, which record the names of certain individuals. These names are perhaps those of *śresthis* to whom these seals belonged[35]. *Śreṣṭhi-nigamasya* showing a *stūpa* like design over a railing in the upper field and with string marks on the reverse, has been found in the course of recent excavation at that site[36].

Sealings bearing the legend *'śreṣṭhi-kulika nigama* bear the device described as money chest[37]. *Kulika* perhaps denotes an artisan[38]. Therefore, these seals indicate that *śreṣṭhis* and *kulikas* combined together and formed their own guild[39].

Most abundant are the seals bearing the legend *'śreṣṭhi-sārtthavaha-kulika-nigama* and the money chest device. Dr. Bloch has discovered 274 seals bearing the legend[40]. Some others were brought to light by Dr. Spooner in course of his excavations at the same site[41]. These seals are invariably combined with other seals on clay lump bearing the names of private individuals. Most of these names are of *kulikas,* such as Hari, Ugrasimha etc.[42]. Only one name *Sārtthavāha,* Daḍḍa is available, while two names of *'śreṣṭhis,* 'saṣṭhidatta and Śridāsa also occur[43]. Only in one case it is found along with the stamp of the office of *Yuvarājapadiya Kumārāmātya* (Chief of the prince's miniṣters)[44]. It seems that *sārtthavāhas* also joined hands with *śreṣṭhis* and *kulikas* and thus the guild of *śreṣṭhi-sārtthavāha-kulika* came into existance. These seals are dated as belonging to the end of the 4th cent. A.D.[45]. These two hundred and seventy four seals were found in one chamber. The chamber was perhaps a store room for keeping sealed letters and documents[46].. Dr Bloch's suggestion on the above seal is, "The numerous among the seal impressions is that referring to the corporation or guild of bankers *(śreṣṭhi)* traders *(sārtthavāha)* and merchants *(kulikas)*....... It looks as if during those days something like a modern chambef of commerce existend in upper India at some big trading centre perhaps at Pātaliputra[47]. Of course, it would not be reasonable to suppose that something like a modern chamber of commerce existed at Basārh or Pātaliputra at such an early date. The association of a variety of names with these seals also negates this suggestion. Secondly, these seals are conspicious by their absence at other sites. Therefore, it is not possible to agree with Bloch's view. Hence, it is safer to interpret the term in the ordinary sense of a market town. The Basārh seals were manufactured by the guild of merchants *(śreṣṭhin),* carvan traders *(sārtthavāha),* and artisans *(kulikas)* which were powerful organizations with the ruling powers in different parts of India during the Gupta period.

These seals perhaps record the loans taken by the members for some business purposes[48]. Those members whose names occur frequently such as that of *Iśānadāsa* which occurs in 75 cases, and that of *Mātṛdāsa, Gomiswāmi* and *Ajapāla* occuring in 38, 37 and 16 cases, respectively, borrowed money from the guild or stood as surety for loans granted to others whose names occur occasionally[49]. Thus, these seals can be taken as testimony to the banking function of the guilds. The legends, *'namaḥ'*, *'namastamai'*, *'Bhagavata namaḥ,' paśupataḥ* also occur along with the impression of guild seals[50]. These legends tend to emphasize the binding character of the agreements or campacts[51].

A rare sealing excavated from Basārḥ records the legend *'śreṣṭhi-sārtthavāha-prathama-kulika nigama'*[52]. As the *śreṣṭhi* and the *sārtthavāha* were quite wealthy and influential in comparison to the artisans, it was perhaps found necessary to keep a balance in representation for which *kulika* was replaced by *prathama kulika* in the joint organization.

Besides these archaeological finds, inscriptional finds also attest that the guilds had their own seals. The Nagardhan plate of Swamiraja records the gift of 20 *nivaratnas* of land by the corporation of elephant riders. The corporation had no authority to make any such grant of land. Therefore, it requested the ruling authority to do so on their behalf and it was allowed to affix its own seal containing the emblem of a goad[53].

After the disintegration of the Gupta empire, there followed a period of confusion and chaos. Therefore, no extant specimens of guild seals and sealings have been recovered so far from any of the sites belonging to early medieval India.

One important fact which is revealed from the above survey is that all the seals and sealings as well as coins were issued by the guilds of merchants and traders and none by the artisan guilds. This establishes the view that

the merchant guilds had become more powerful and commanded some sort of control over the artisan guilds. These seals and sealings must have been used to authenticate the commercial transactions of the guilds. They also served as an emblem of their influence and independent status.

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Dr. Beena Jain
C/o Dr. K.K. Jain, N.R.L.C.
E/3, Aliganj, Lucknow.

Photography of Museum and Archaeological Objects

Anil Risal Singh

In the twentieth century the role and contribution of photography in every sphere of human life can not be denied, whether it is some social occasion, important event, medical, engineering, space or conservation research, photography plays its important role.

Photography in its different forms plays a very important role in Museums, Archieves, Archaeological units and conservation laboratories engaged in conservation and research of museum and archaeological objects. Photomacrography, photomicrography ultravioled, infrared, X-ray and scanning electron microscope photography in some way or other play their major role.

The photography of museum objects is perhaps the most direct way of increasing their value, as one individual can not visit all the museums of the world, although good photographs general information about them could be secured and modern education pursuing its trend towards visual instructions, finds museum photography a valuable ally.

Whenever it is possible specimens to be photographed should be brought to photographic studio, because the variety of equipment available here is greater than anywhere else and equipment whether it is camera its accessories light or some other accessories play very important role in photography of any object.

Equipment

The camera equipment is standard except that fast shutters are unnecessary since the subject do not move. The view cameras also called monorail cameras are generally preferred for museum photography as view camera has shifting tilting and swing moments, which is helpful in controlling sharpness, depth-of-field & distortion, etc. These cameras also produce big negative, which gives a much better quality and sharpness. The only demerit of view camera is their bulky size, which could be managed with the use of tripod. So a tripod is also very necessary which will not slide on slipping floors. The third important thing is a sensitive exposure meter for determining exposure.

The camera should have reasonably long bellows that will permit close-ups with long focus lenses, to rduce perspective distortion. The camera should be arranged for back focus that is the ground glass section able to move forward and backward on the camera bed, so that close-up may be focussed quickly.

The lenses to be used should, of course, be well corrected; lenses need not be fast but good definition is essential. Each lens should be equipped with a lenshood and provision for using filters.

Studio accessories should include a 10x magnified to view the image on the ground glass, and a milimetre scale for measuring the specimens.

The studio lighting equipment is similar to that used in other branches of photography, but the direction and quality of light should be arranged according to the subject and need.

Light becomes visible and usable for photographic purposes only when it is intercepted by some substance and reflected from it. An object becomes visible only when it reflects the light, which falls on it. It does not mean that the object has to reflect the same amount of the light as caught by its surface; only certain amount of the light is reflected from the object while rest is absorbed by it.

The lightness and darkness of a given surface depends mainly on two factors. The first is the quantity of the light which is received by it, this factor is governed by the brightness and intensity of the light source, and by the distance of the light source from the object.

The second factor is the coefficient of reflection means the percentage of light which is reflected from the surface.

It is the nature of light to spread out from its source in all directions. The photographer has no use of this wealth of radiant energy, he must subordinate it to his purpose. The obvious way to bar the haphazard flow of light and to guide in to one direction is to "fence" it by means of a reflector. Thus, the light rays which radiant backwards and sideways are caught and reflected into forward stream of light.

The character of the light depends largely on the size and shape of its source, smaller the light source harder the light, large the light source softer the light produced by it. By means of adequate fitting the character of light can be still further moulded.

Two main groups of photographic fitting have been constructed.

i. Flood Light
ii. Spot Light

i. Flood Light

As the name implies the flood light illuminate a wide area, flooding it all over with an equal inteisity. It is typical of flood light, that outside its field of coverage it slowly deteriorates its luminasity. Thus creating a range of half tones which become gradually darker as they recede from main area of illumination.

The shape of the reflector and the position of the lamp changes the illuminating quality of the flood light. Wide spherical reflectors give a wide and softer beam of light, while deep parobolic reflectors produce a hard and more centered light.

Another factor determining the character of the light is the kind of surface inside the reflector. A dull metal finish naturally produces a more diffused light than a polished surface. The hardest flood effects are obtained by mirror reflectors.

ii. Spot Light

Spot light produces a 'Spot' of light, as the name indicates.

The light area created by spot lighting breaks off abruptly, so that light and dark stand side by side without the wide belt of intermediary half tones between them. The focusing facility of spot lights enables us to throw light over for greater distance.

Techniques

One general rule is that the more complex the specimen is in form, the more diffuse the illumination should be, by this one could avoid sharpedged shadows.

The vartical camera adjustment is most convenient for museum objects like bones, pottery, coins, small size paintings etc. General role for the colour of the back ground is that if object is lighter in colour back ground colour should be dark and if the object is darker in colour back ground should be lighter. For light coloured object we could use black velvet cloth for the back ground, most of the shadows cast by the object disappear on black back ground, but if shadows still give some problem we could use another arrangement, objects should be placed on clean glass elivated about 6 inches from the back ground, this way we could displace the shadow of the

object and it would not come in the picture frame, but one precausion should be taken, glass with black back ground creates lots of reflections of th camera, copying apparatus, and hands and face of the photographer etc. to overcome this problem have a thick black paper little bigger than the size of glass having a hole at the centre, large enough to be fitted on the camera lens, by placing this paper on the camera reflections could be avoided. This elivated glass arrangement could also be used for dark colour objects on white back ground, the shadows cast by the object usually vanish by the time they reach the white back ground. Tiny pellets of plastic modelling clay under the specimens will hold them at any angle on the glass plate and prevent rolling.

Examine each specimen carefully to select the most perfect side for photography. When inscriptions or pits on the surface of the object are faint a glancing beam or raking light from the spot light bring them out. Other way is filling the inscription or pits by black chalk on white surface & white chalk on the black surface. Faint scratching on pottery etc. could be strenghened by wetting the surface slightly and photograph it while still wet.

Specimens must be accurately levelled before they are to be photographed and camera is then levelled on tripod, and then lights must be placed according to the object and ones need. Lighting is far more important element, the arrangement of the apparatus the exposure and the processing of the film can be standardised easily enough but the intensity, direction and quality of light makes the final result and it must be adjusted quite precisely, this could only be achieved by experience.

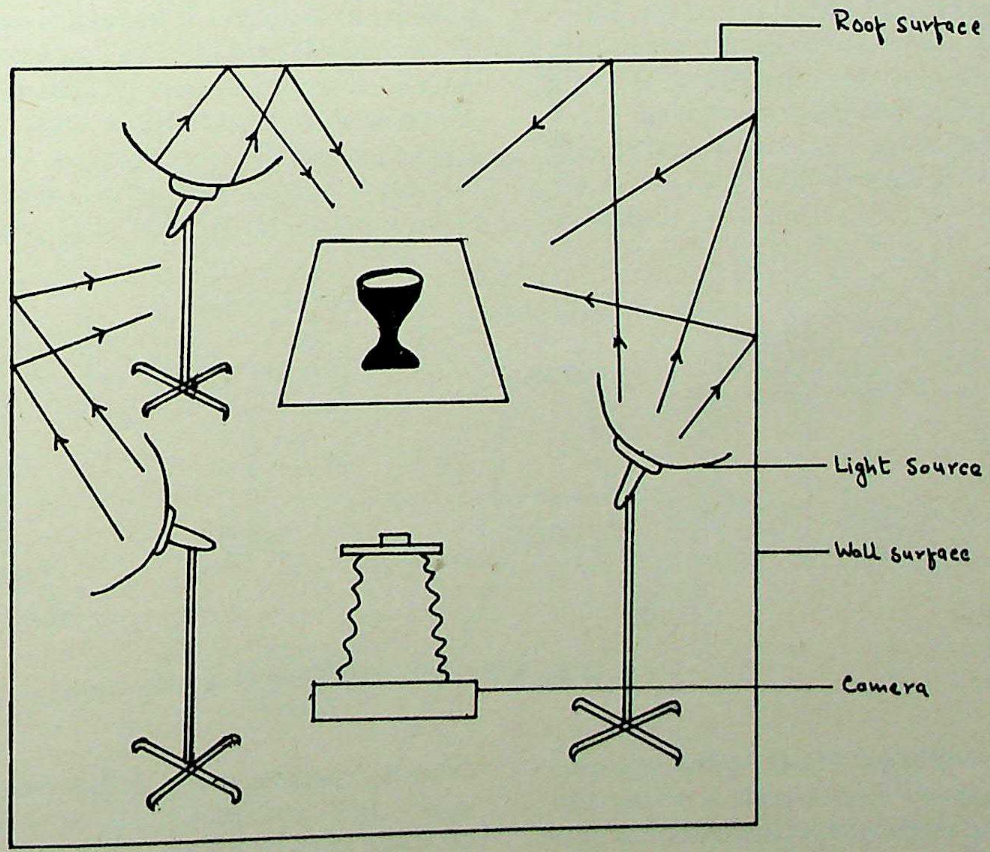

Fig. 1. Reflected light method.

For shiny or high polished objects very soft light is used. These shiny objects cause so many light problems because they are such a good reflectors. Shiny objects such as silverware or chromium plated objects should be considered as curved surface mirrors and dealt with accordingly. For shiny or highly polished objects very soft light illumination is used, there are many ways to have soft lighting illumination, for example turn the light sources towards some white surface e.g. white roof, wall etc. and make use of the light reflected from these surfaces (Fig. 1), second method to make light softer is to place a screen of muslin cloth between the object and light source and make use of this transmitted light, the

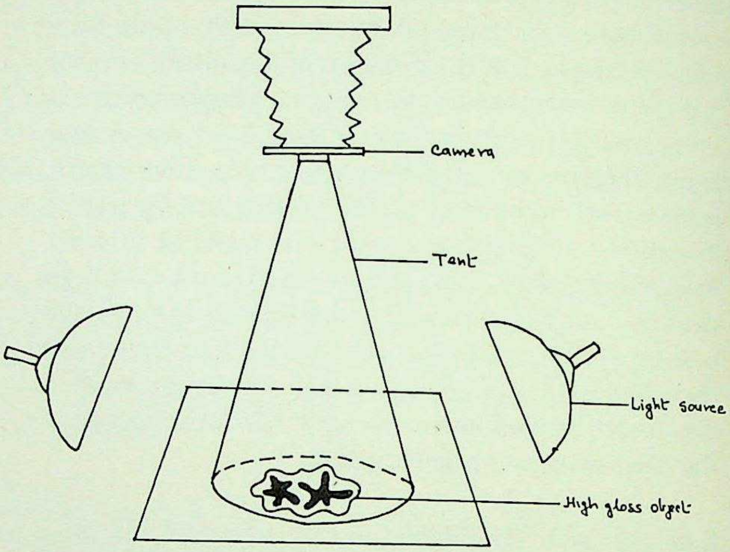

Fig. 3. Tent lighting method.

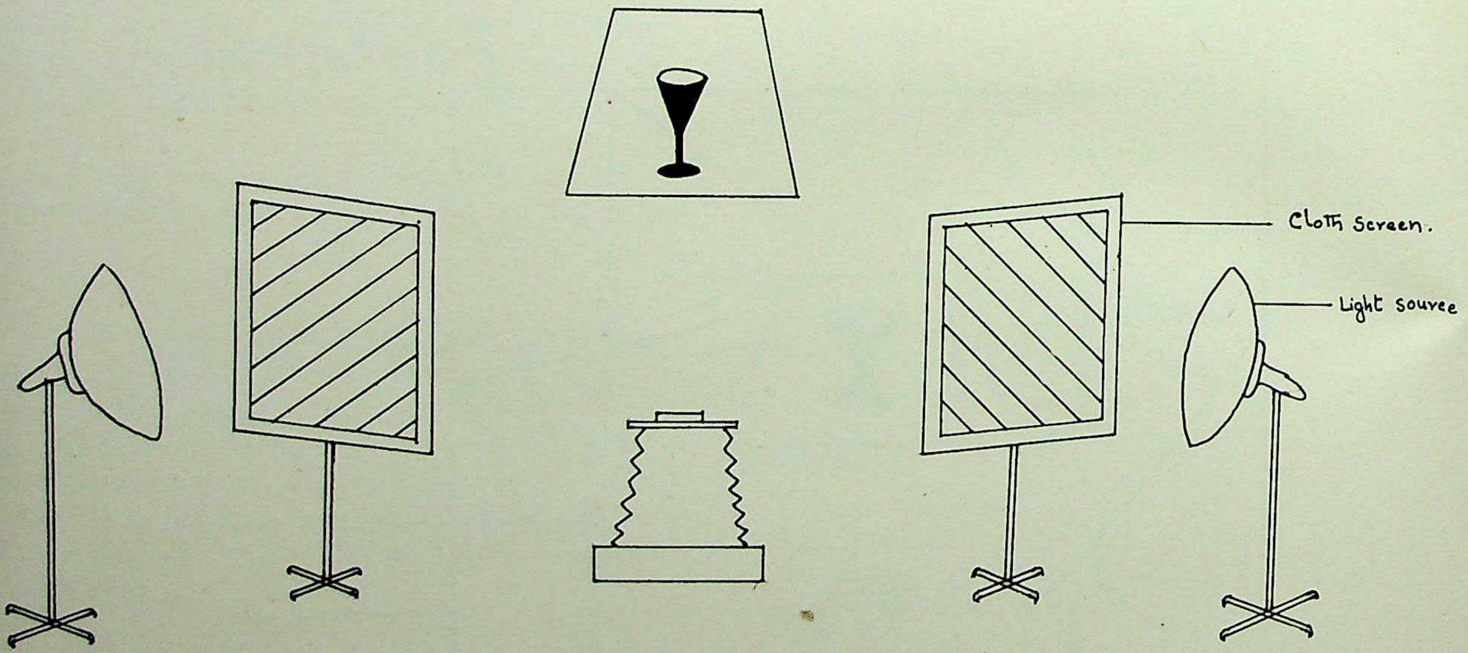

Fig. 2. Transmitted light method.

quality of the light will be soft (Fig. 2) Another very good method to photograph shiny objects is to use tent method of illuminating the objects, this tent could be of white paper or cloth covering the object from all sides having only one hole where camera lens could be fitted, now lights could be arranged to illuminate the tent, through tent tranmitted soft light will reach the object (Fig. 3).

When it is desired to have dark back ground for the dark object, light arrangement will be entirely different, otherwise black background will merge with the object, here back light is used to outline shapes separating similarly toned objects from one another with a rim of strong highlight around the object (Pl. 1).

Glass objects create lot of problems in photography

conventionally, glassware is photographed simply by placing it in front of an illuminated back ground, frontal illumination is not generally used because of the problems of multiple and consequently distracting reflections, a large flood lamp is used to cover the area of the back ground, if desired a diffused spot light can be used to create the smaller circle of illumination at the base of the set, for keeping the object opaque glass could be used (Pl.2).

For objects of low relief, which includes coins fragments of surface decorated materials, beads and seal impressions, usually a single oblique light is used which casts strong shadows and too great a contrast in the negative, to overcome these problems second fill in light is used or light rays of the first light source could be reflected back by using a white card opposite to the light, but this method also do not yield very good result because if the surface of the object is shiny such an arrangement will probably still give two high contrast level. The edges of the relief of a silver coin for example may be rendered as hard white lines. Theoritically for these types of objects light should come from the very top of the object which is not possible because on this position camera is already there. To have a ring flash attached on the camera lens could be very effective, but this method also gives excellent result over a limited range, it could be successfully used for most non-shiny objects, and to the limited range of magnification. Coins or other objects that are all shiny, often give unacceptably hard reflections and if the lens consequently, the ring flash, is closer than abot 20 cm. to the object, the effect will be lost and the object is simply flooded with harsh shape and exture of the object will merge.

Axial lighting is very much useful for shiny coins, medallions etc. In the axial lighting, light do not fall directly on the object, but only reflected light rays fall on the surface of the object, main light is directed down the lens barrel. For the axial lighting put a reflector vertically on the ground facing upwards, and then place a clean glass on it, now for example to photograph shiny coin keep a thick black paper about 5 times bigger than the coin on the glass and then put coin on it, now a white paper cone could be placed on the coin in a way so that wider end surrounds the coin and narrower end of the cone fittend to the camera lens (Fig. 5). Here the light rays from the light source first fall on the cone surface and from here these will be reflected on the coin surface as shown in the Fig. 5. The darkness and lightness of the contours and flat surface depend upon the shape and size of the cone. In Fig. 6, coin has been photographed by the cone method of lighting.

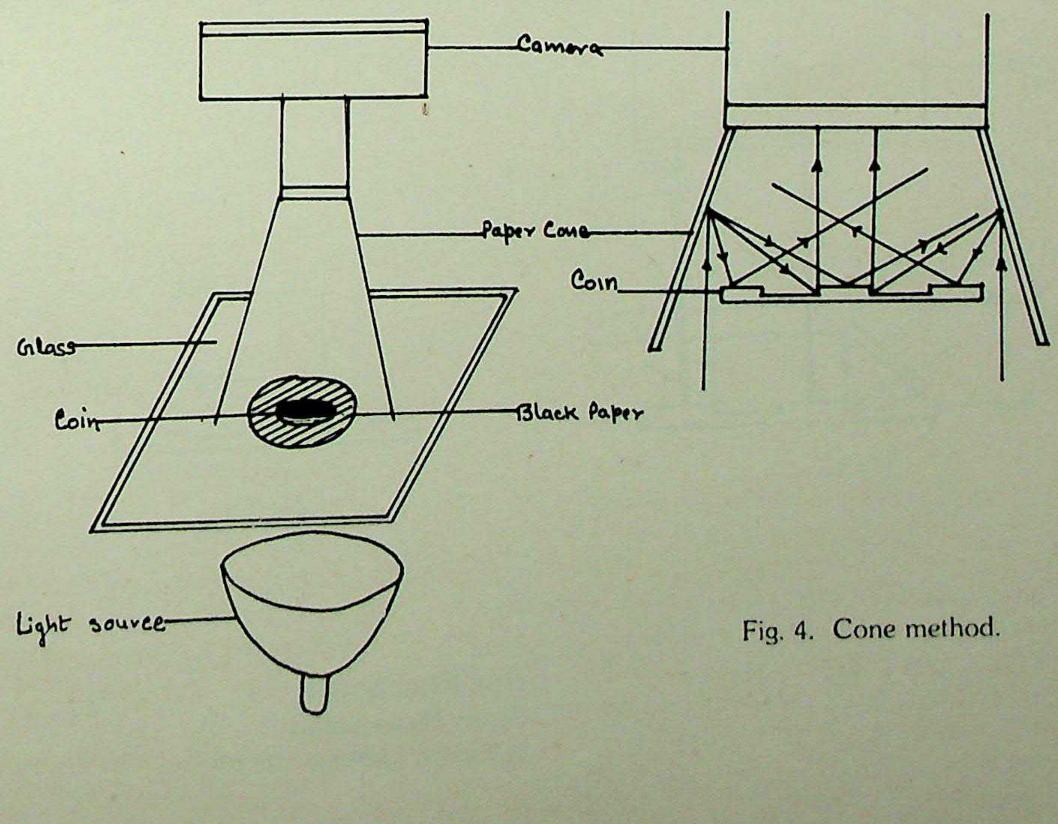

Fig. 4. Cone method.

Another method of axial lighting can be arranged by setting a piece of plane glass between the lens of the camera and the object at an angle of 45°. A beam of litht is then directed at the under side of the glass which feflects part of the light down on the object and photograph is taken through the back of the glass (Fig. 7), direction of light rays is shown in fig. 8a. In final photograph, contours of the coin will be lighter against dark tone of flat surface (Fig. 8b). In fig. 9, gold and silver coins have been photographed by the same technique.

Some general problems and their possible ways to overcome them have been discussed, but as every museum object could have one problem or other only wide experience and through knowledge of camera and light equipment could yield good result. One must remember that the photograph of the museum objects should always be true representation of the object.

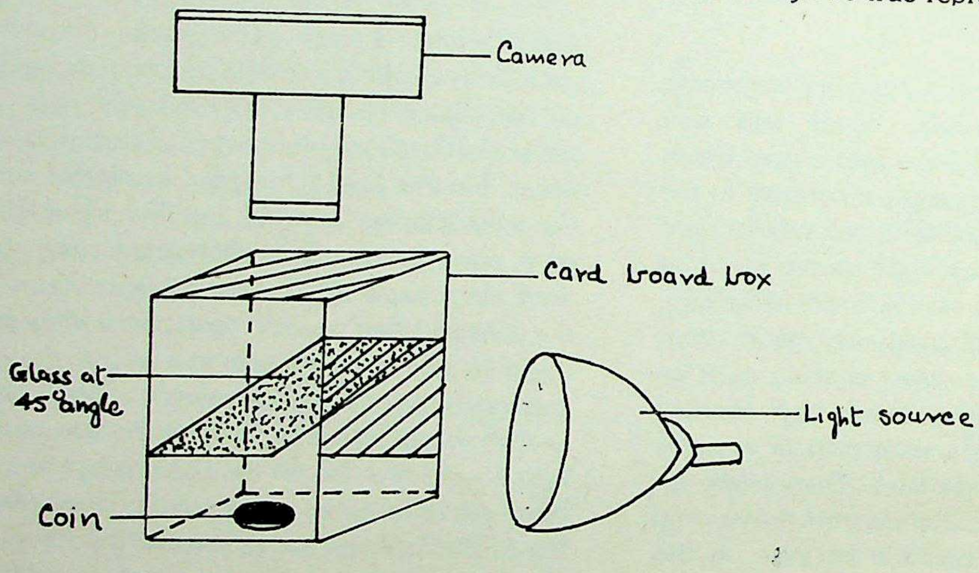

Fig. 5. Axial lighting.

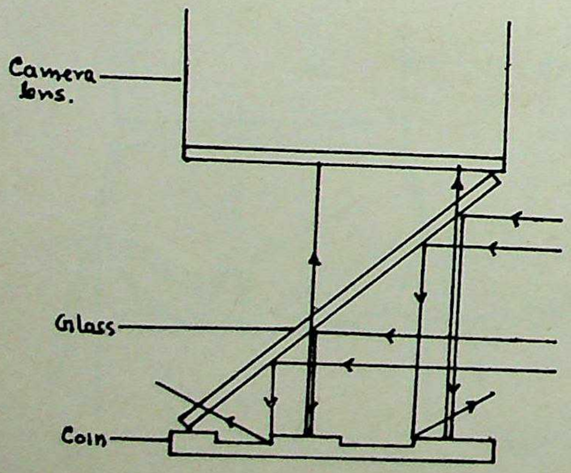

Fig. 6a

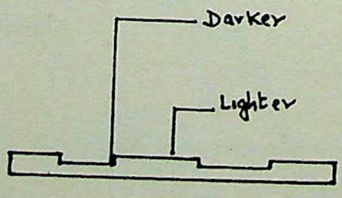

Fig. 6b

Anil Risal Singh
Senior Photographer,
N.R.L.C., Lucknow-226 020.

छाया-चित्र

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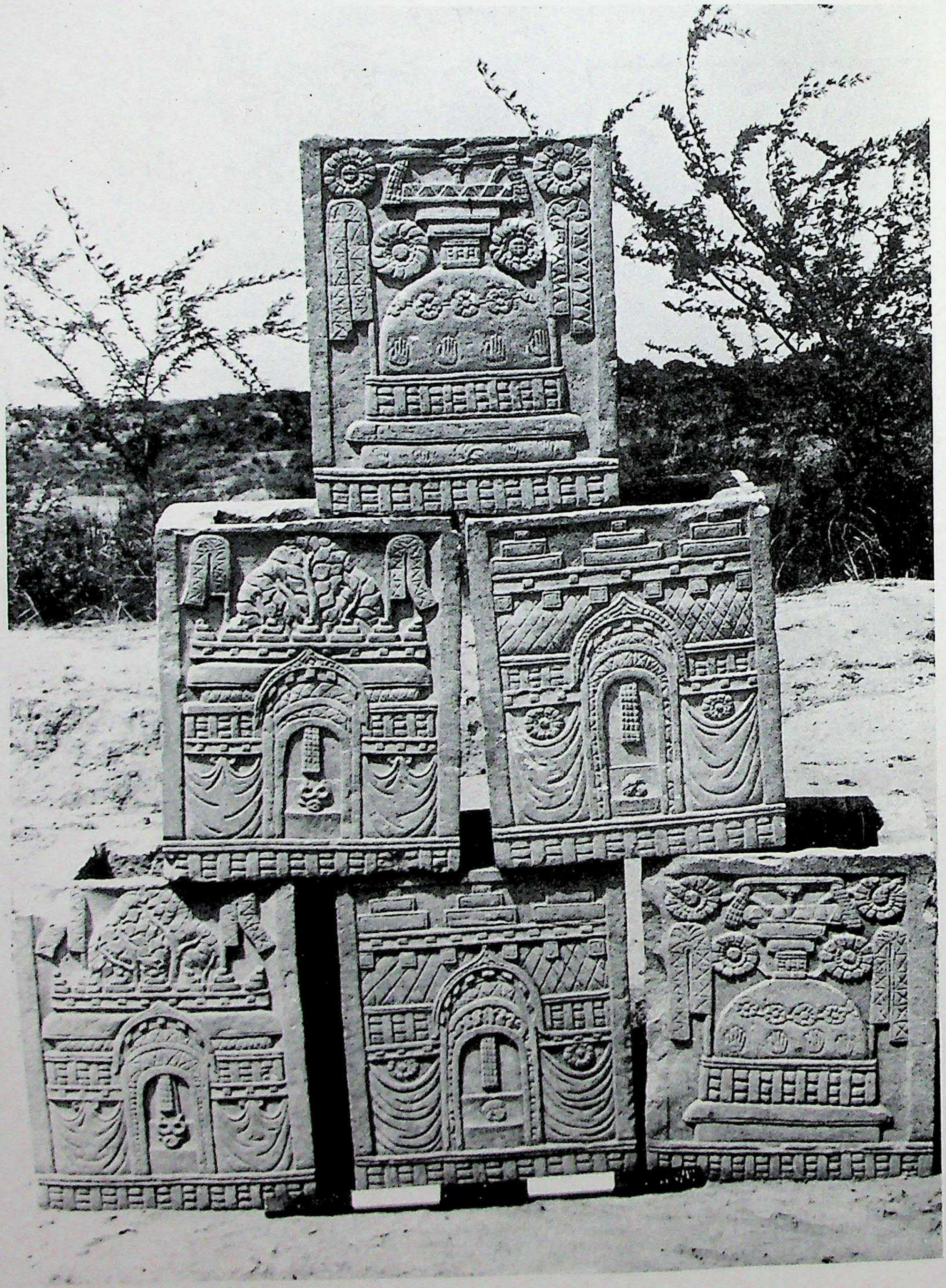
चित्र सं०- 2 तोरण द्वार के पार्श्व-स्तम्भ का शीर्ष भाग, काटर (तिवारी, श्रीवास्तव)

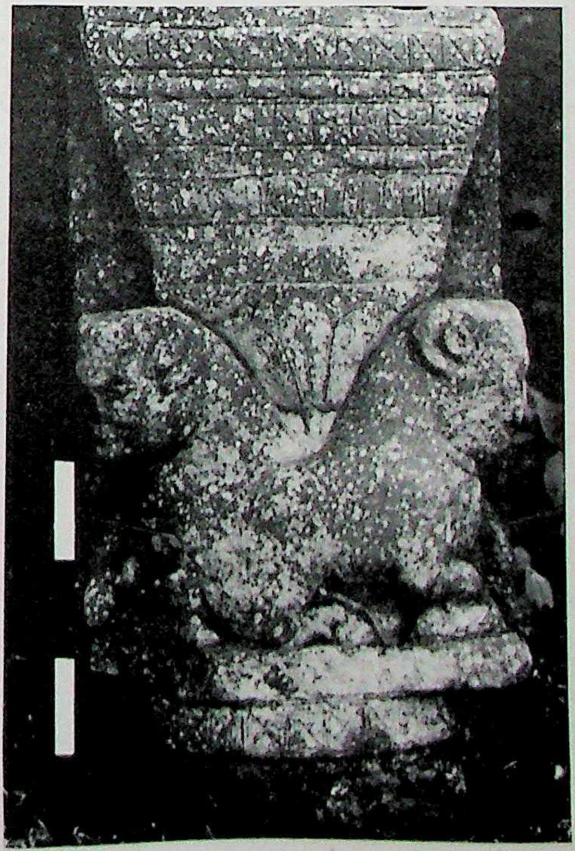
चित्र सं०- 1 तोरण-द्वार का पार्श्व-स्तम्भ, काटर (तिवारी, श्रीवास्तव)



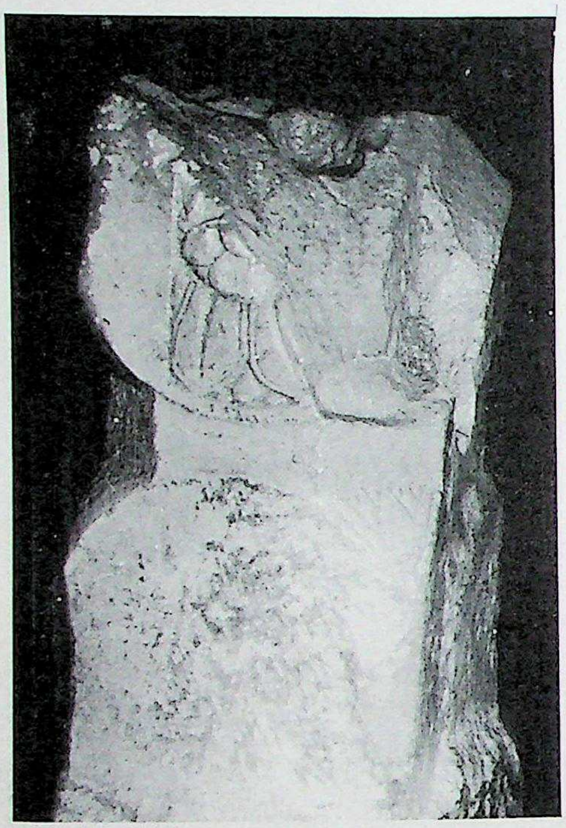
चित्र सं० 3 चौकोर अलंकृत प्रस्तर-खण्ड, काटर (तिवारी, श्रीवास्तव)

चित्र सं० 4 तोरण-शीर्ष का कंगूरा, काटर (तिवारी, श्रीवास्तव)

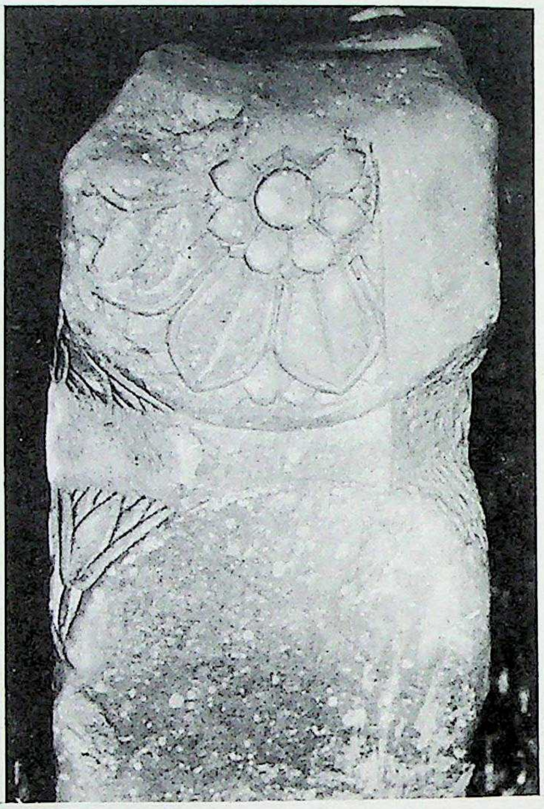
चित्र सं० 5 स्तम्भ शीर्ष (प्रथम पार्श्व), उमरगढ़
(तिवारी, श्रीवास्तव)



चित्र सं० 6 स्तम्भ शीर्ष (द्वितीय पार्श्व), उमरगढ़
(तिवारी, श्रीवास्तव)

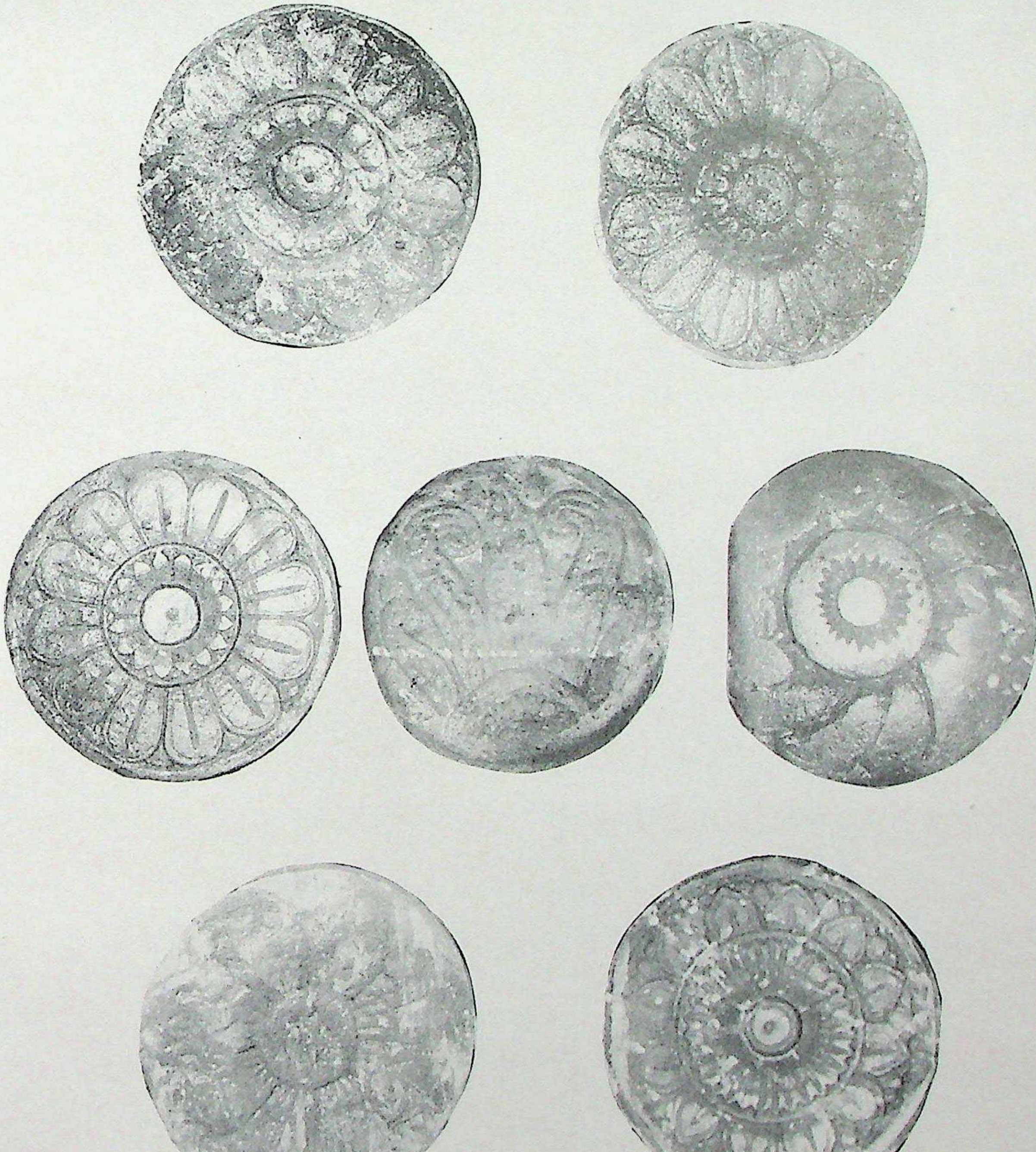


चित्र सं०- 7 वेदिका स्तम्भ, उमरगढ़ (तिवारी, श्रीवास्तव)

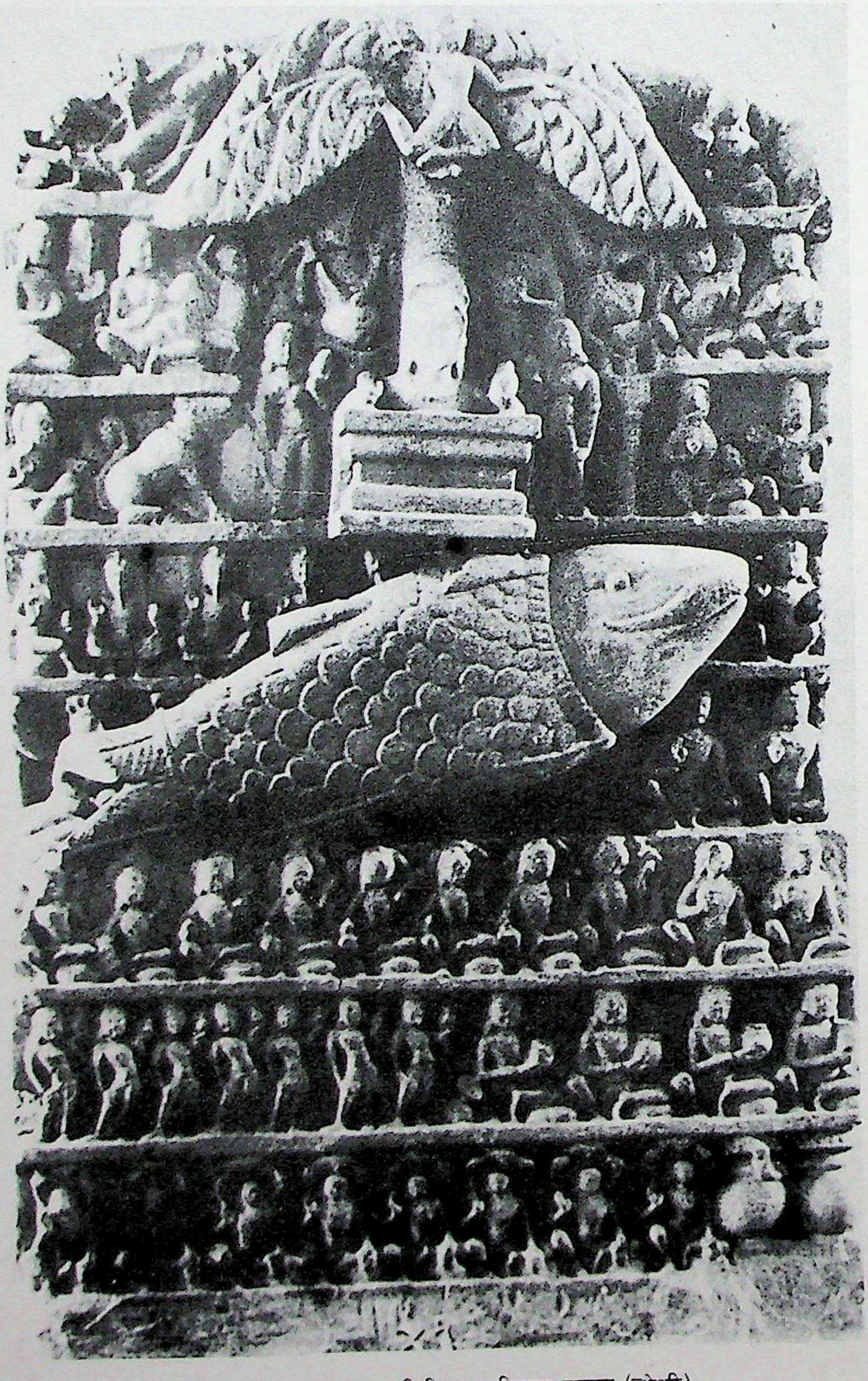


चित्र सं०- 8 वेदिका स्तम्भ, उमरगढ़ (तिवारी, श्रीवास्तव)

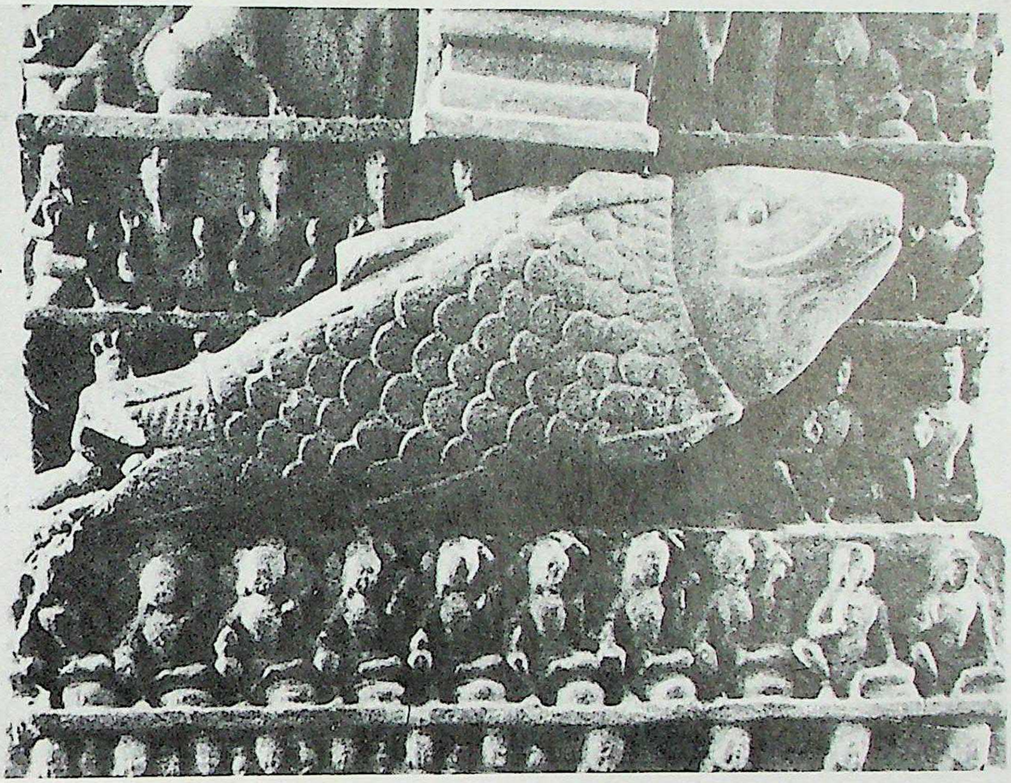
चित्र सं०- 9 गज-आकृति से सज्जित, वेदिका स्तम्भ, मूसानगर (तिवारी, श्रीवास्तव)



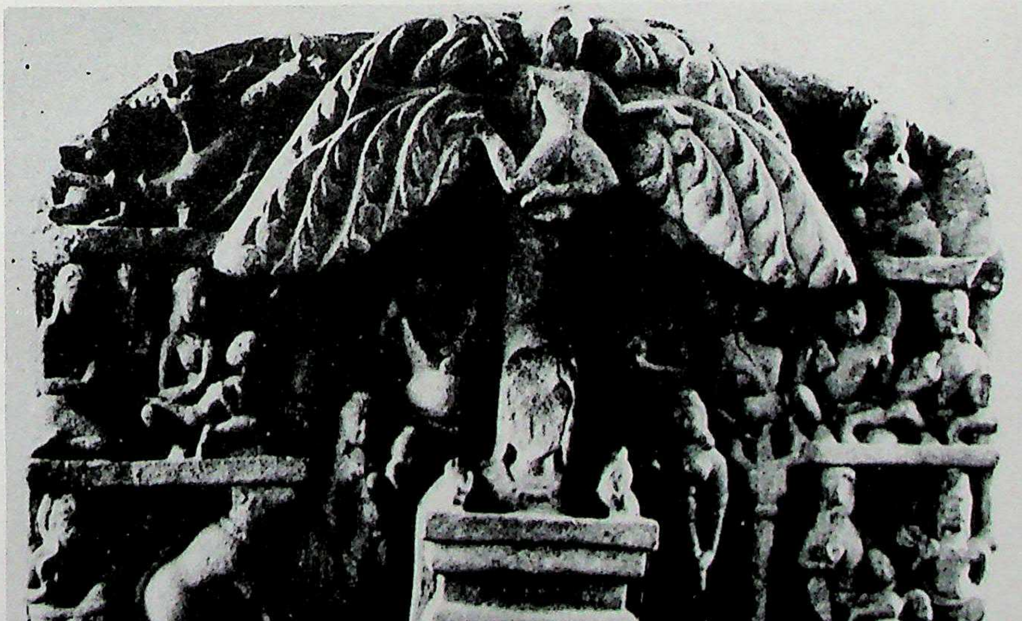
चित्र सं०- 10 वेदिका स्तम्भों और चित्रों पर प्रदर्शित विभिन्न अभिप्राय मूसानगर (तिवारी, श्रीवास्तव)



चित्र सं० 1. प्रयाग पट्ट, ब्रिटिश म्यूजियम लन्दन (जोशी)

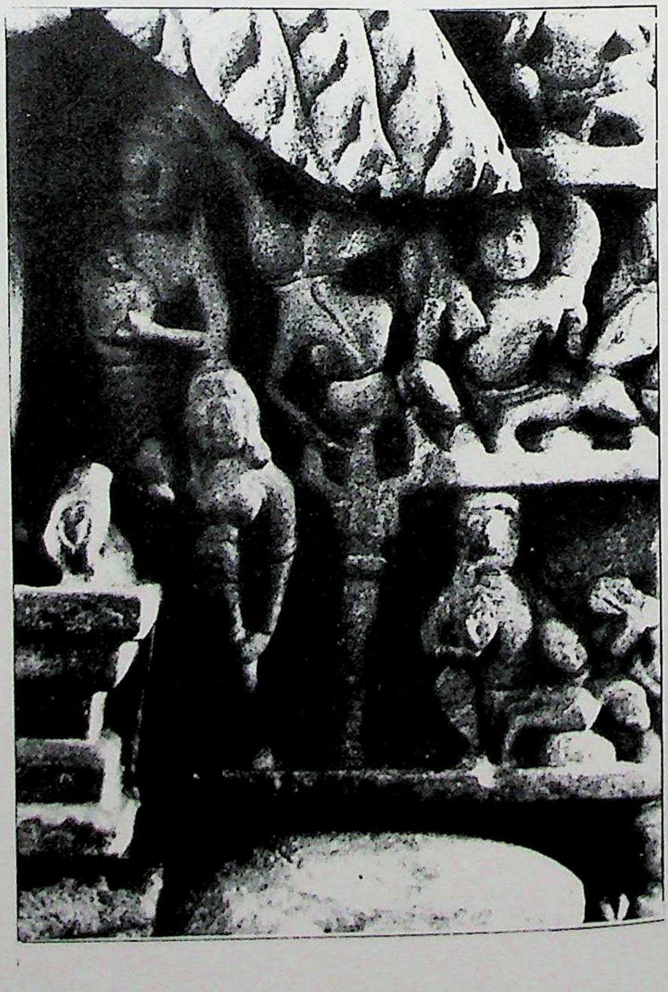


चित्र सं० 2. प्रयाग पट्ट के मध्य भाग में प्रदर्शित मत्स्य (जोशी)



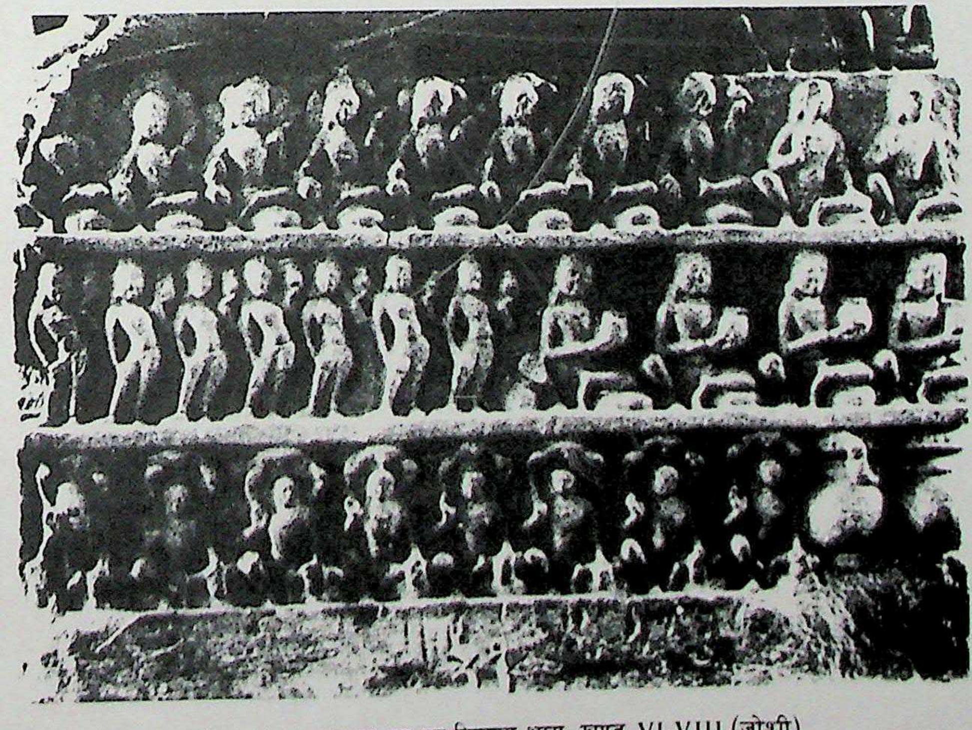
चित्र सं० 3. प्रयाग पट्ट का ऊपरी भाग (जोशी)

चित्र सं० 4. स्थण्डिलारोपित शिव मूर्ति युक्त शिवलिंग, प्रयाग पट्ट (जोशी)

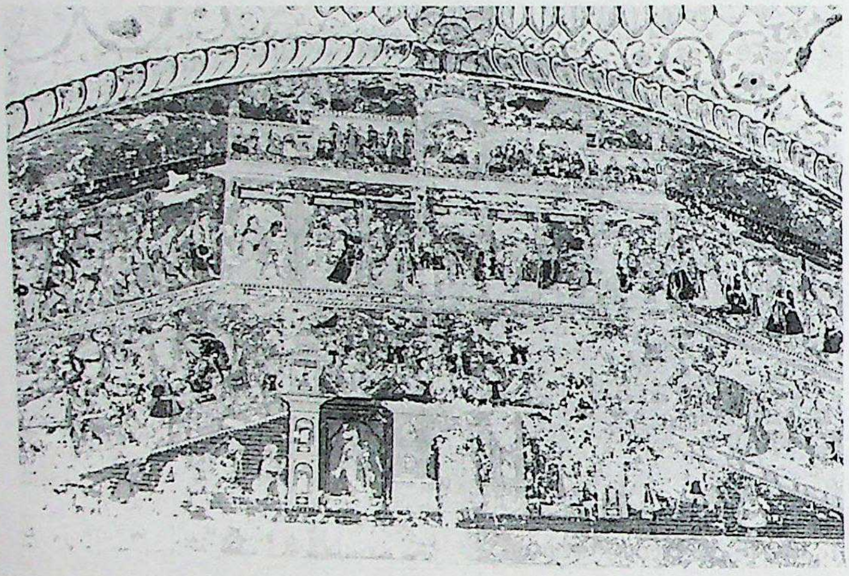


चित्र सं० 5. शिवलिंग के दृश्य दायें पार्श्व का दृश्य (जोशी)

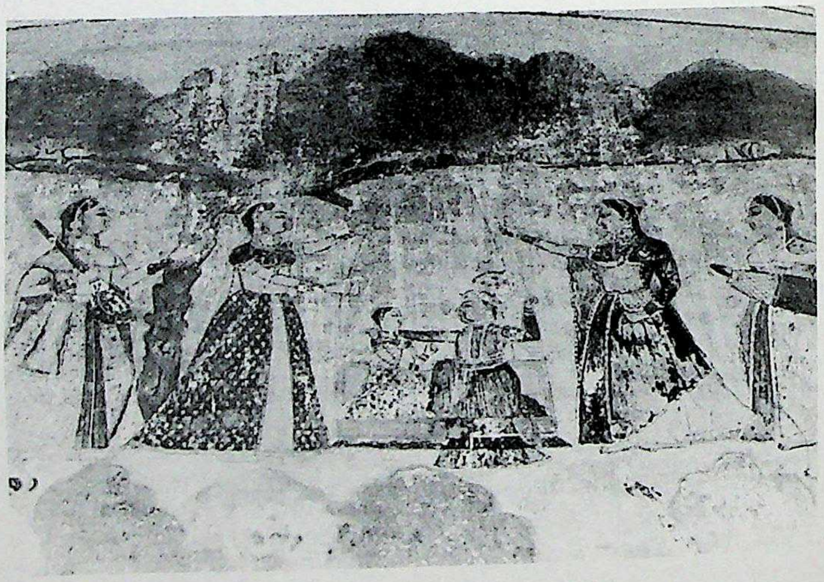
चित्र सं० 6. प्रयाग पट्ट के दृश्य ऊपरी बायें पार्श्व का चित्र (जोशी)



चित्र सं० 7. प्रयाग पट्ट का निचला भाग, खण्ड VI-VIII (जोशी)



चित्र सं० 1. भित्ति चित्र, कुसुम सरोवर, मथुरा (राय)



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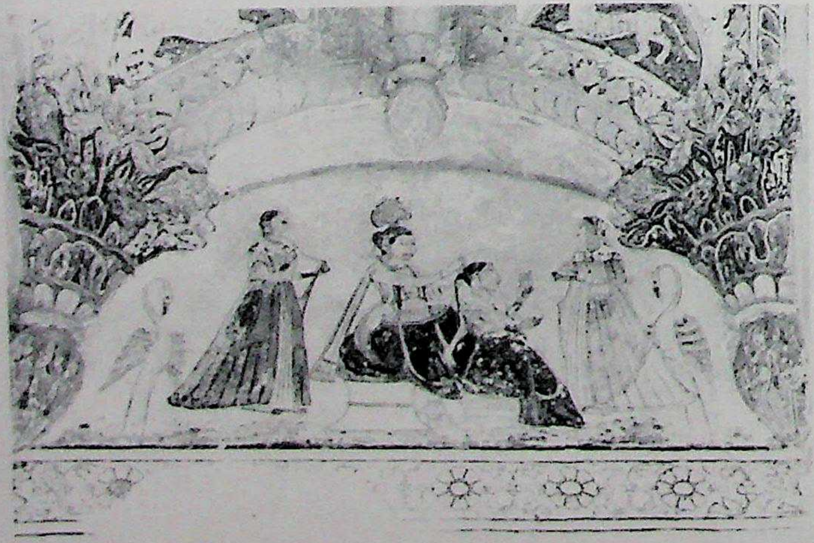
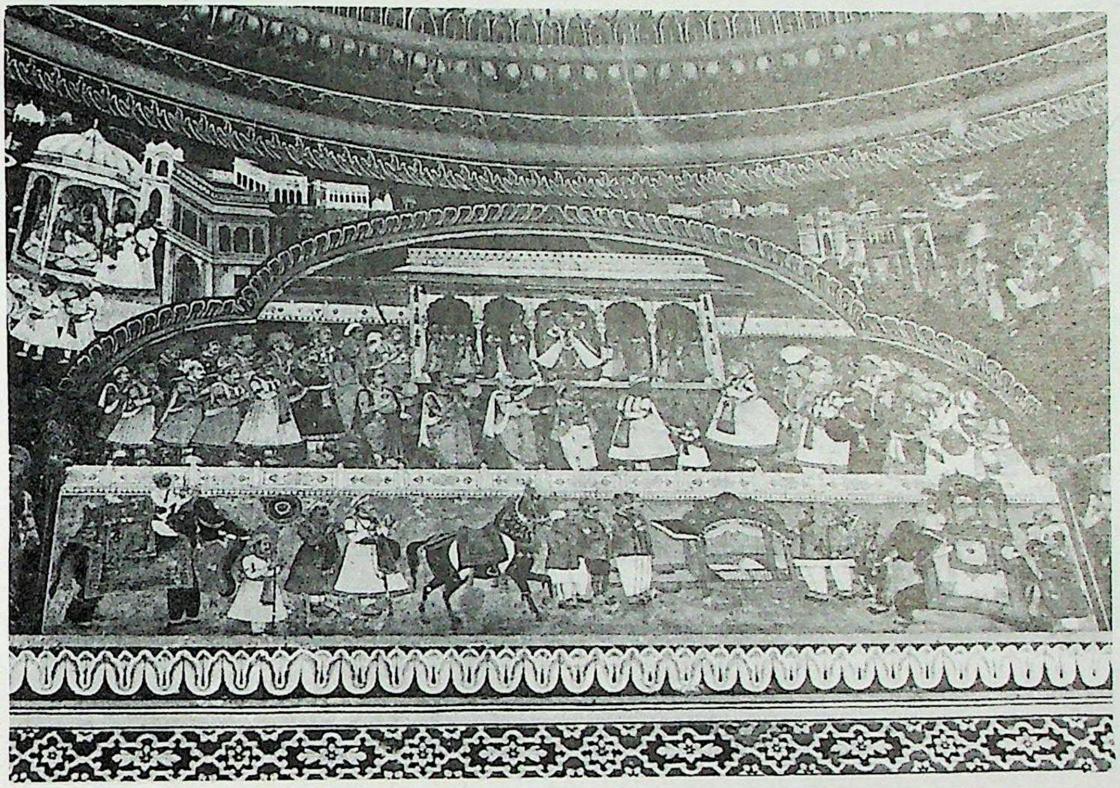


चित्र सं० 3. भित्ति चित्र, कुसुम सरोवर, मथुरा (राय)



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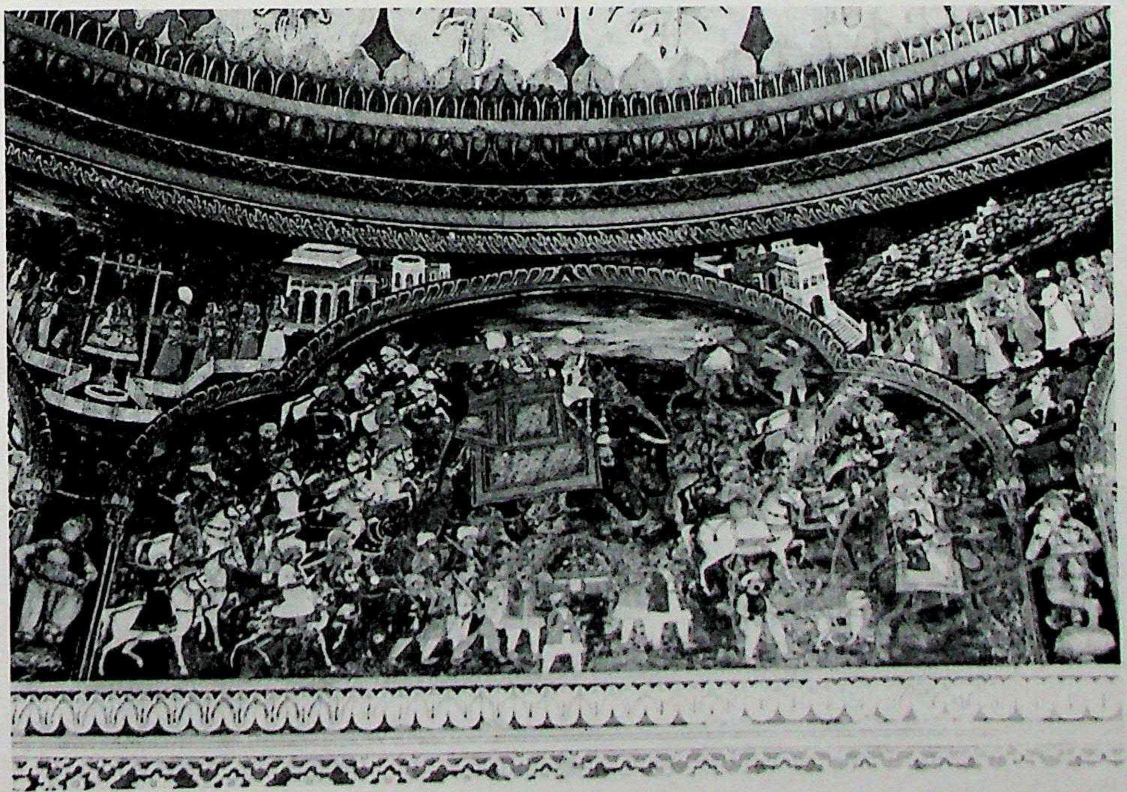
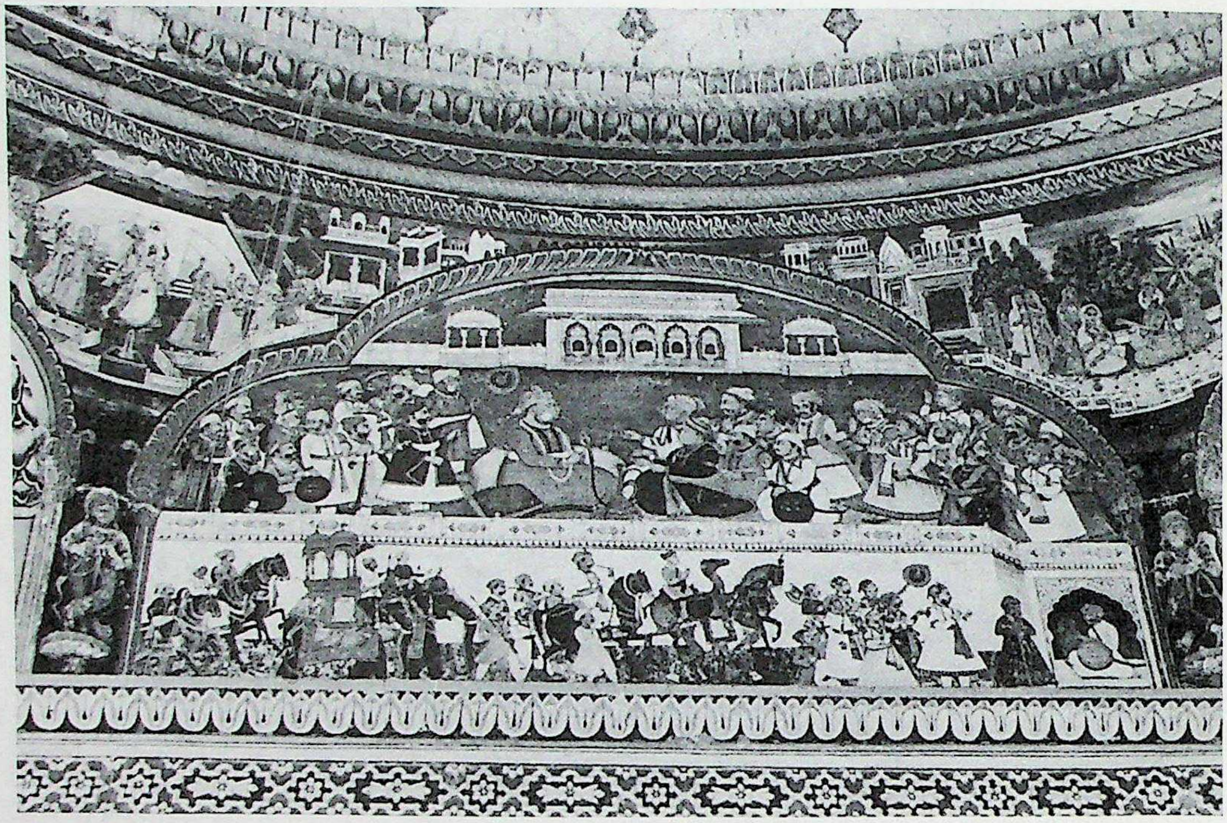


चित्र सं० 5. भित्ति चित्र, कुसुम सरोवर, मथुरा (राय)

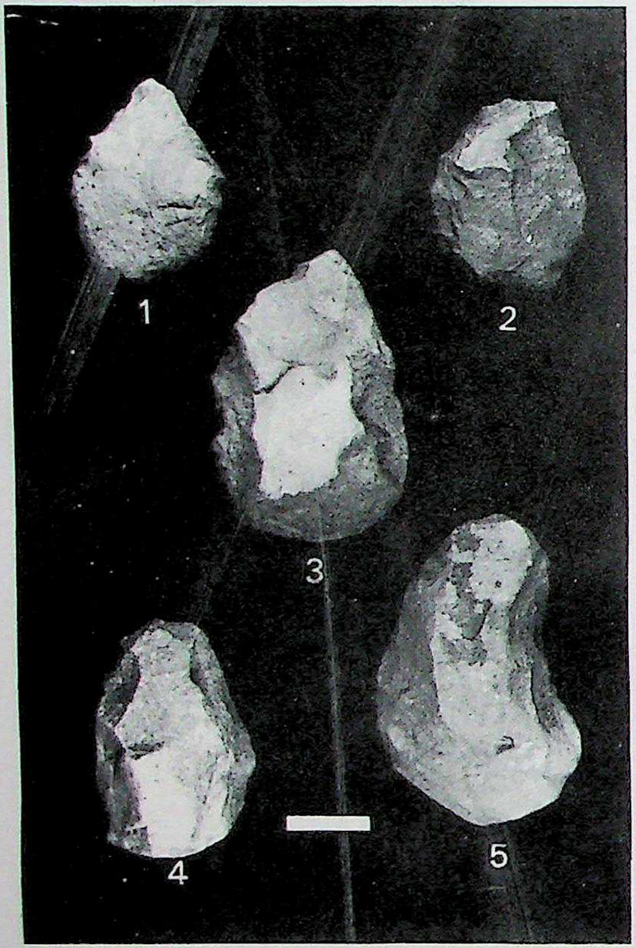


चित्र सं० 6. भित्ति चित्र, कुसुम सरोवर, मथुरा (राय)

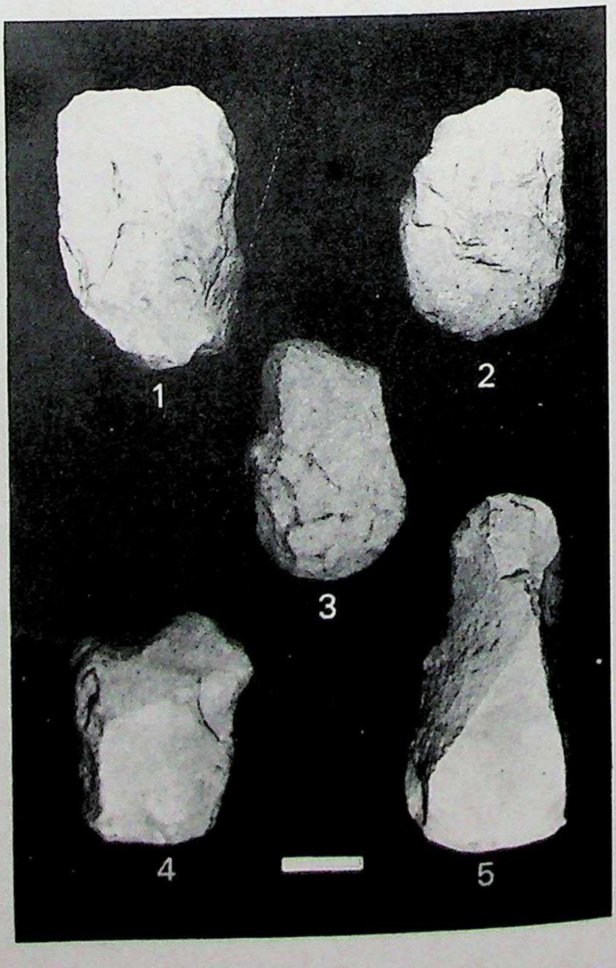
चित्र सं० 7. भित्ति चित्र, कुसुम सरोवर, मथुरा (राय)

चित्र सं० 1. महेश्वर महावराह प्रतिमा, पैठाणी, पौड़ी गढ़वाल (तिवारी, सिंह)

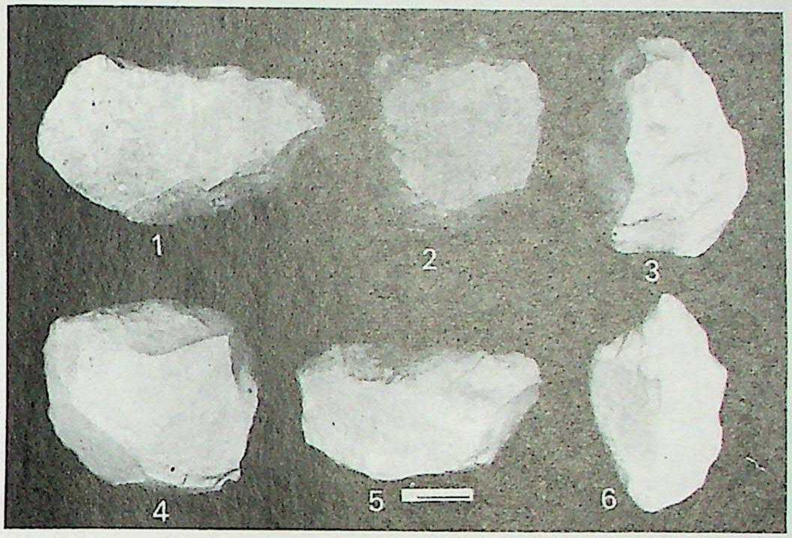
चित्र सं० 2. महेश्वर महावराह प्रतिमा, संग्राली उत्तरकाशी (तिवारी, सिंह)



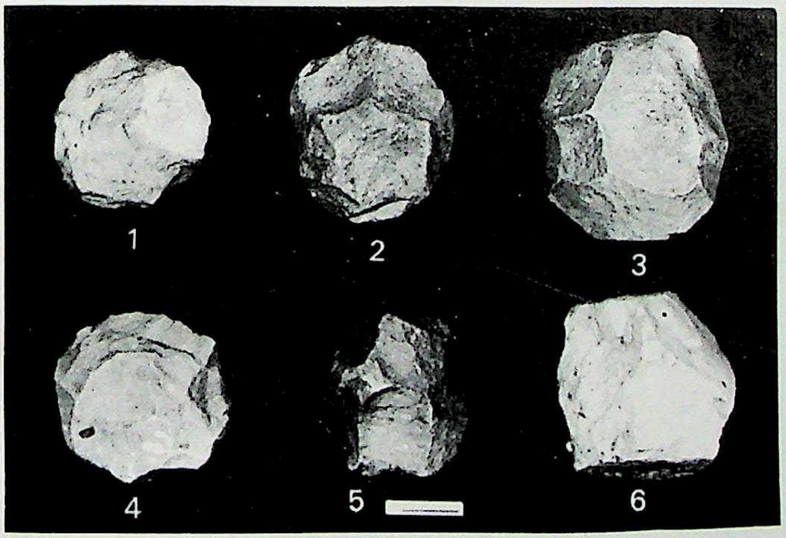
चित्र सं० 1. हस्त कुठार (हैण्डेक्स), देवगढ़, ललितपुर (लाल, सलाहुद्दीन)



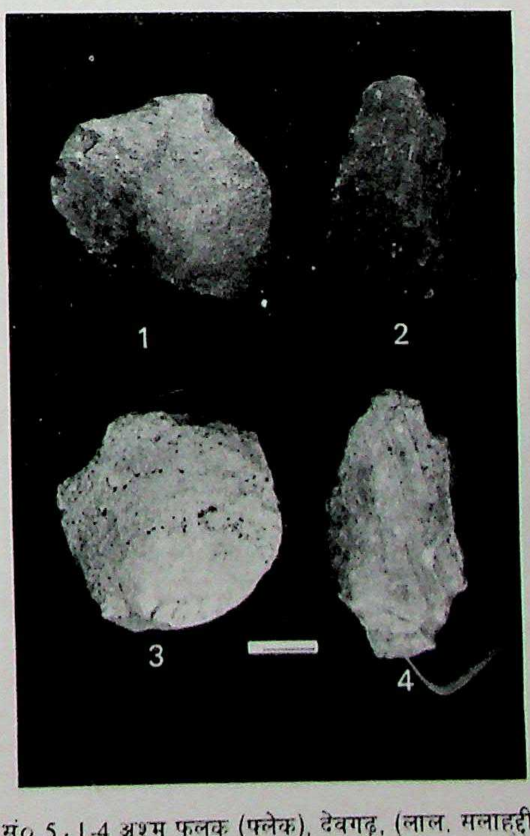
चित्र सं० 2:1-4 परशु (क्लीवर); 5. कुदाल (पिक), देवगढ़. ललितपुर (लाल, सलाहुद्दीन)



चित्र सं० 3:1-5. छोलनी (स्क्रेपर); भल्लक (प्वाइंट), देवगढ़, ललितपुर (लाल, सलाहुद्दीन)



चित्र सं० 4:1-4. प्रकाश कोड (डिस्कॉएड); 5-6 क्रोड (कोर). देवगढ़, (लाल, सलाहुद्दीन)

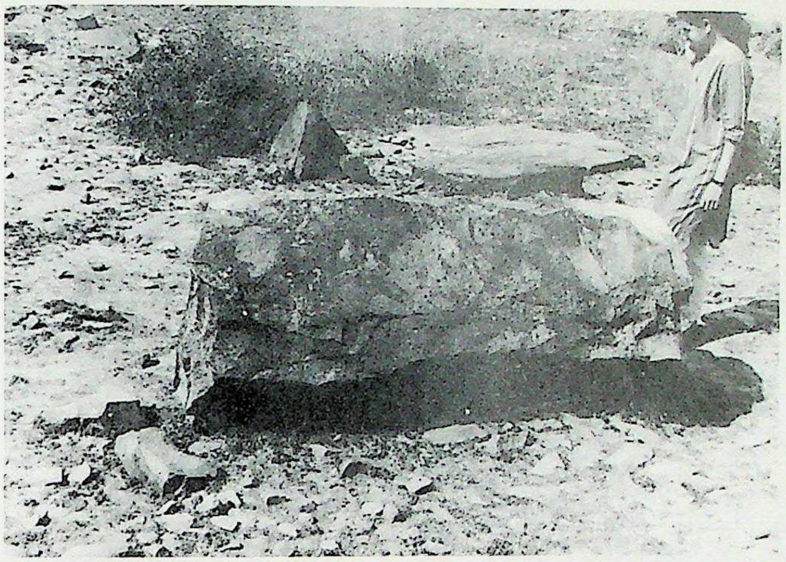


चित्र सं० 5.1-4 अश्म फलक (फ्लेक), देवगढ़, (लाल. सलाहुद्दीन)

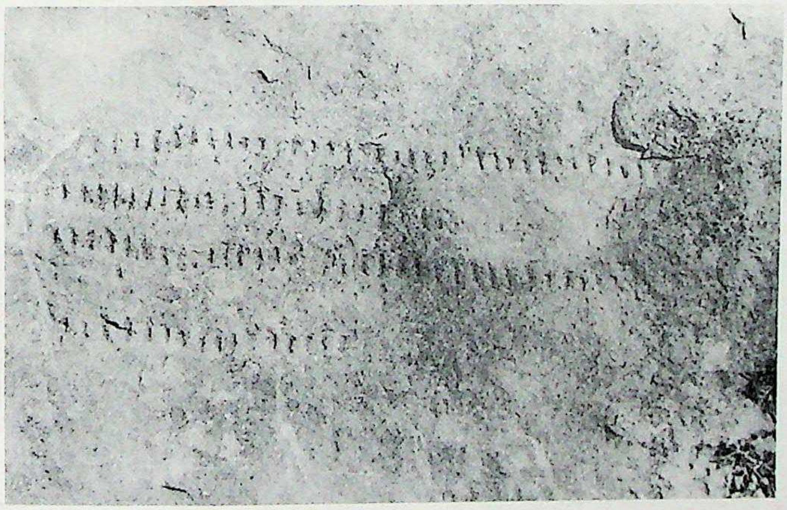
चित्र सं० 1. इन्द्र वैकुण्ठ पलेठी, टिहरी गढ़वाल (श्रीवास्तव)

चित्र स० 2 भूमि-स्पर्श मुद्रा में बुद्ध : रीठेश्वर महादेव, जनपद अल्मोड़ा, लगभग 12वीं शती ई० (सिंह , कृ० कुमार)

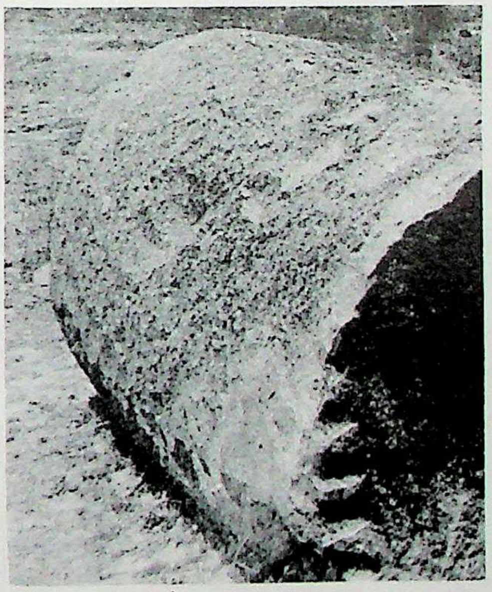
चित्र सं० 3 जाजमऊ उत्खनन से प्राप्त मौर्ययुगीन अभिलिखित मृणमण्डल का अग्रभाग, कानपुर शहर (सिंह, गि० चन्द्र)



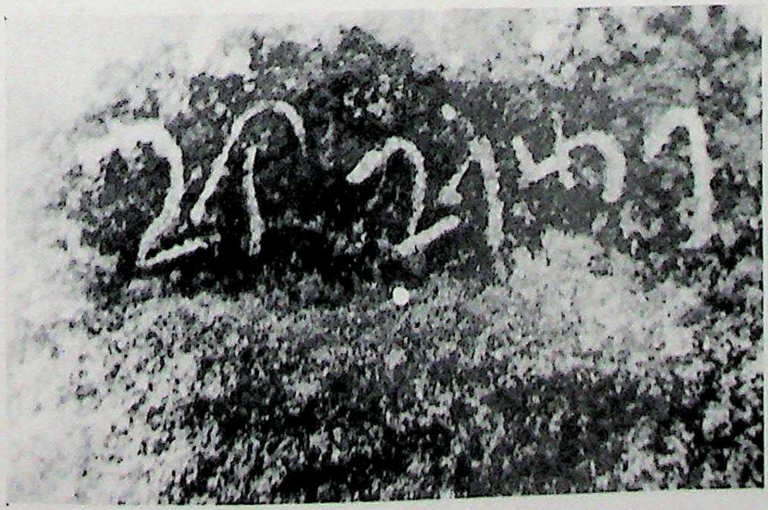
Pl. 1A. Unfinished block of stone, stone quarry, Chunar, Mirzapur (Pant)



Pl. 2. Series of short incised lines on rock surface, Chunar (Pant)

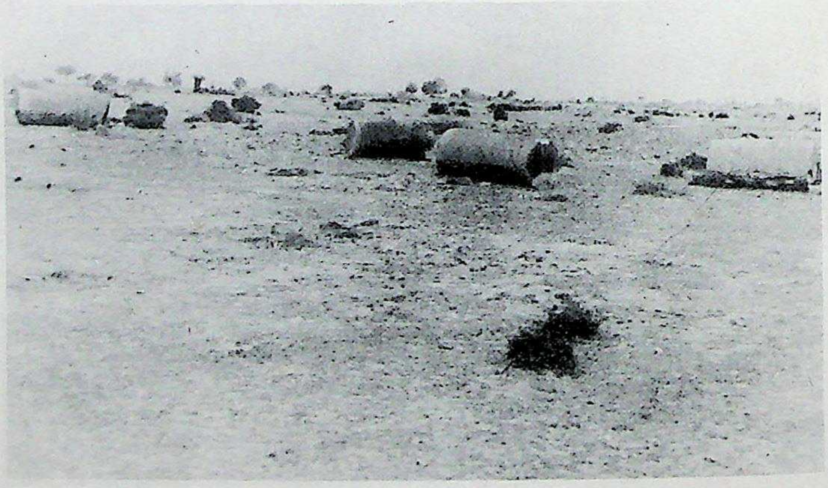


Pl. 1B. Chisel marks on the edge of Pillar (Pant)



Pl. 3. Kharoshṭi Inscriptions, Chunar (Pant)

Pl. 4. Pillars lying in the valley, Chunar (Pant)

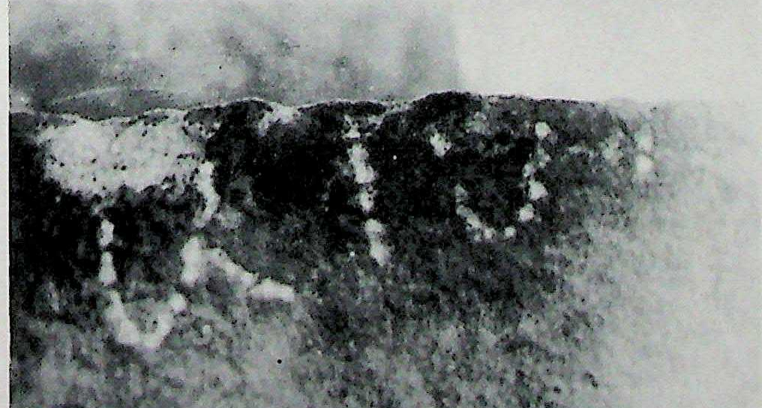


Pl. 5. Cylindrical blocks lying near the quarries (Pant)

Pl. 6. Cylindrical block near the quarries (Pant)

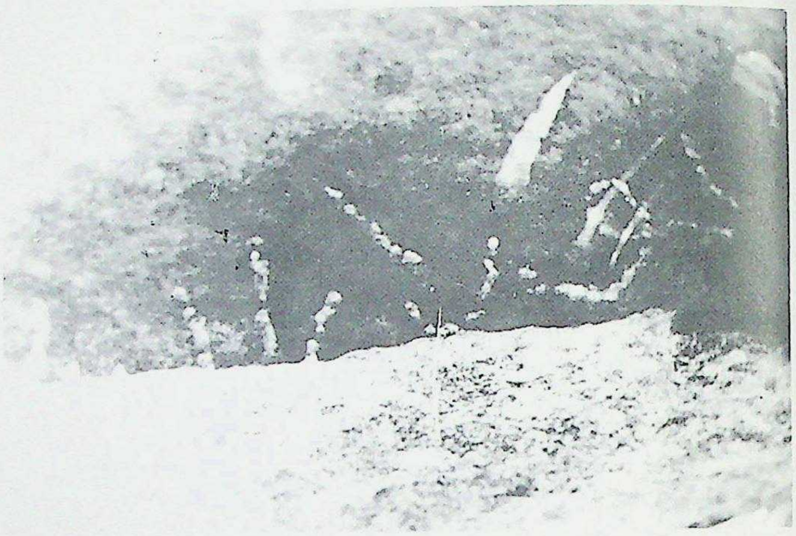
Pl. 1. Stone quarry with Pillars,Chunar, Distt. Mirzapur (Mukherjee)

Pl. 2. Kharoshti Inscription, Chunar, Mirzapur (Mukherjee)



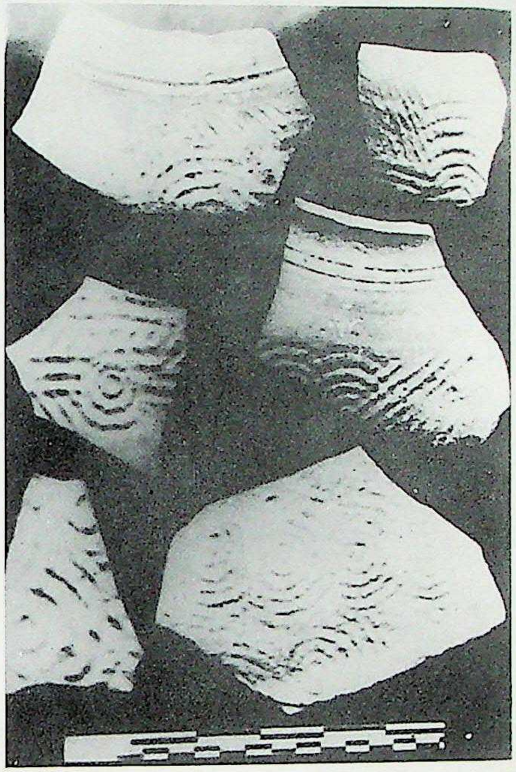
Pl. 3. Kharoshṭi Inscription, Chunar, Mirzapur (Mukherjee)

Pl. 4. Kharoshṭi Inscription, Chunar, Mirzapur (Mukherjee)

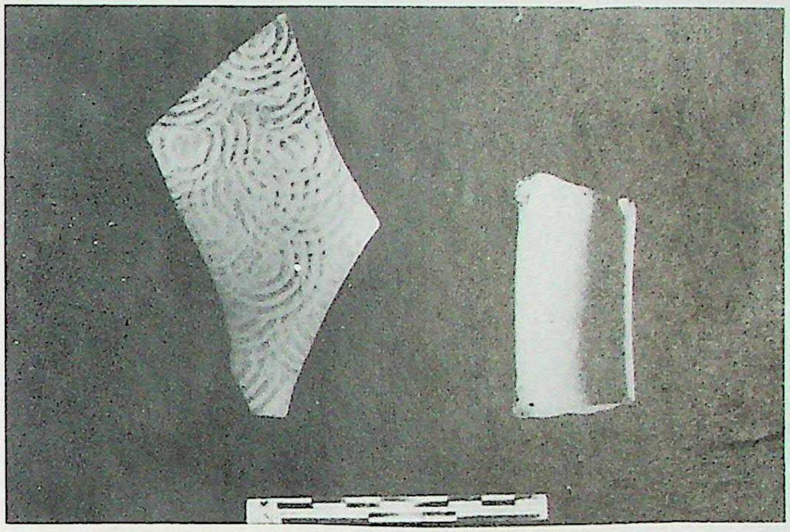


Pl. 5. Kharoshṭi Inscription, Chunar, Mirzapur (Mukherjee)

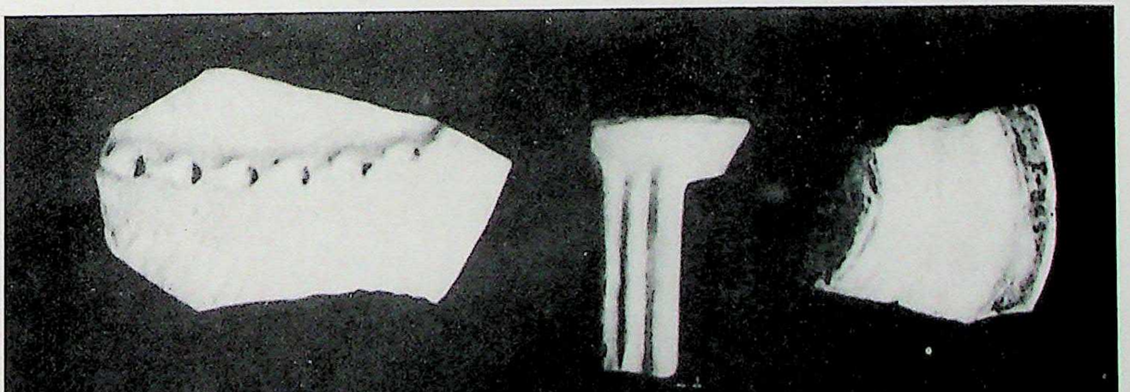
Pl. 6. Kharoshṭi Inscription, Chunar, Mirzapur (Mukherjee)



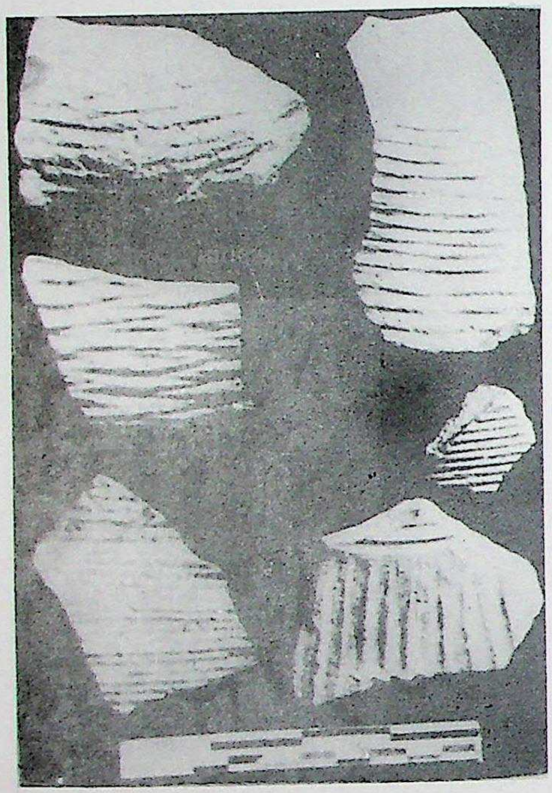
Pl. 1. The storage wares of medium to course fabric bear spiralled decorations all over the body of the spot (Tripathi)



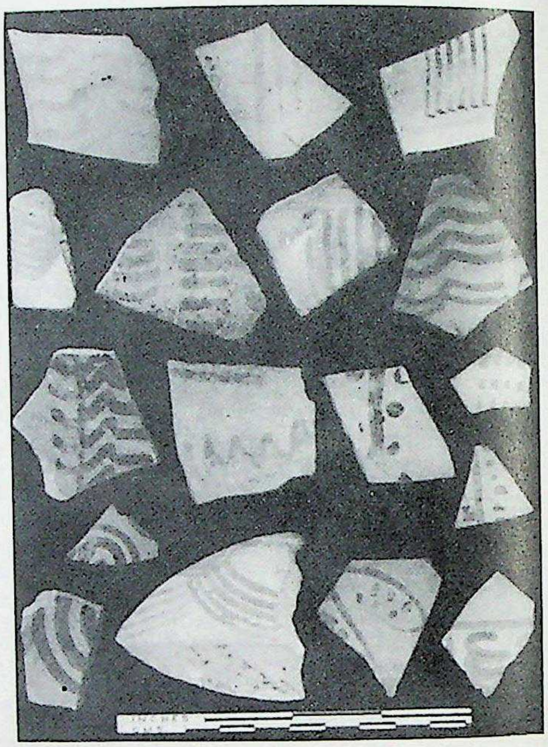
Pl. 3. Red Pottery with shallow impressed designs (Tripathi)



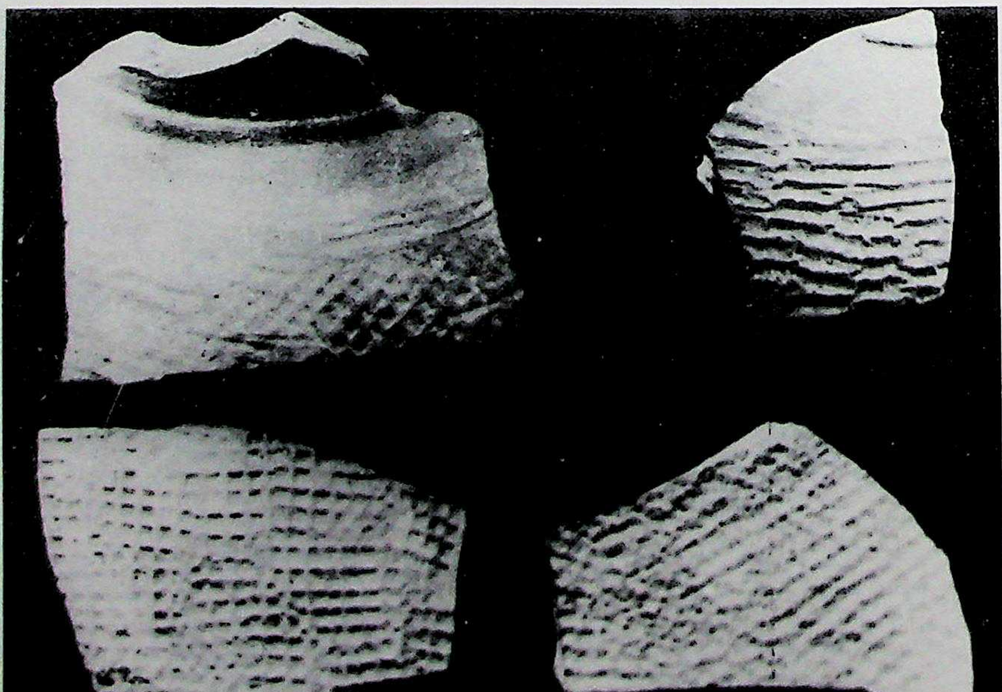
Pl. 2. Certain unusual or unstandard shapes, Sardargarh (Tripathi)



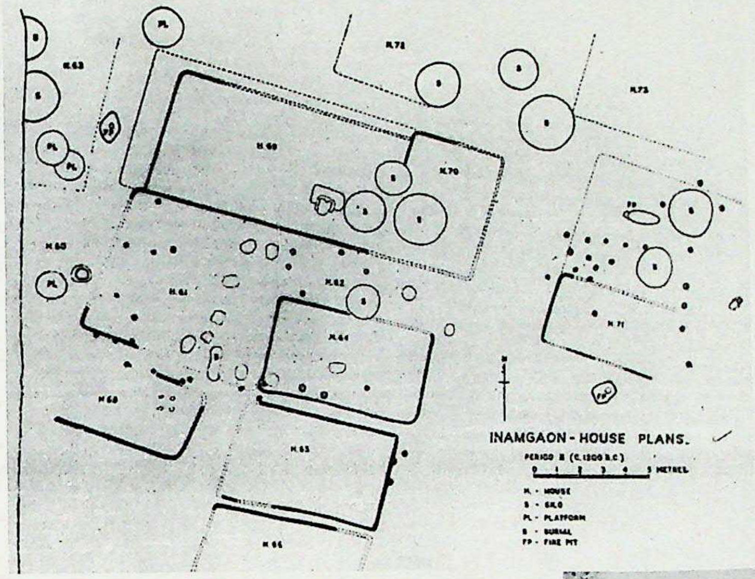
Pl. 4. Impressed decorations showing concentric circles or lines (Tripathi)



Pl. 6. Grey Painted Sherds, Rajasthan (Bikaner) (Tripathi)

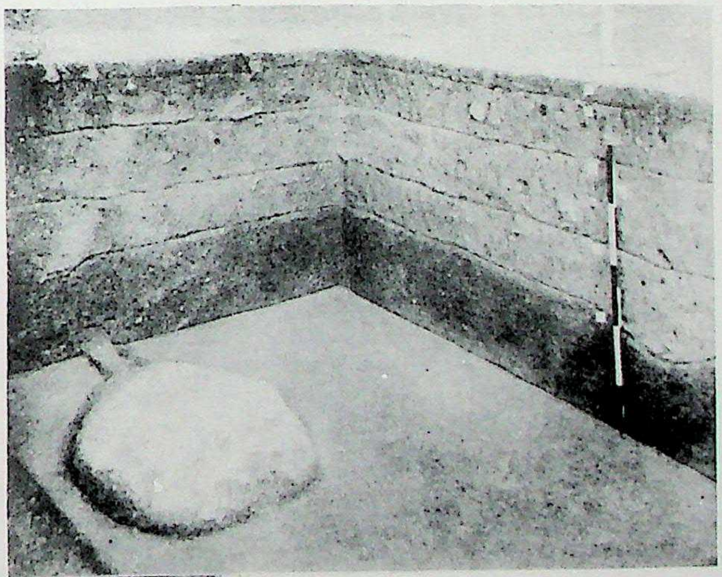


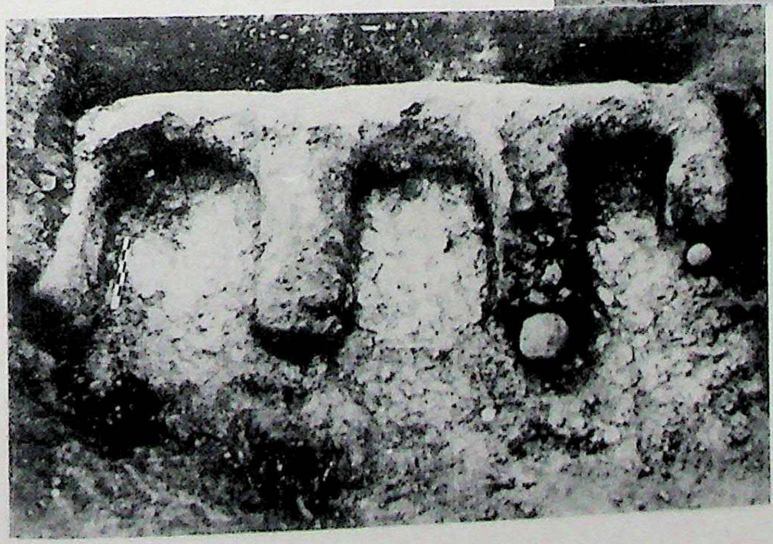
Pl. 5. Impressed decorations showing concentric circles or lines (Tripathi)



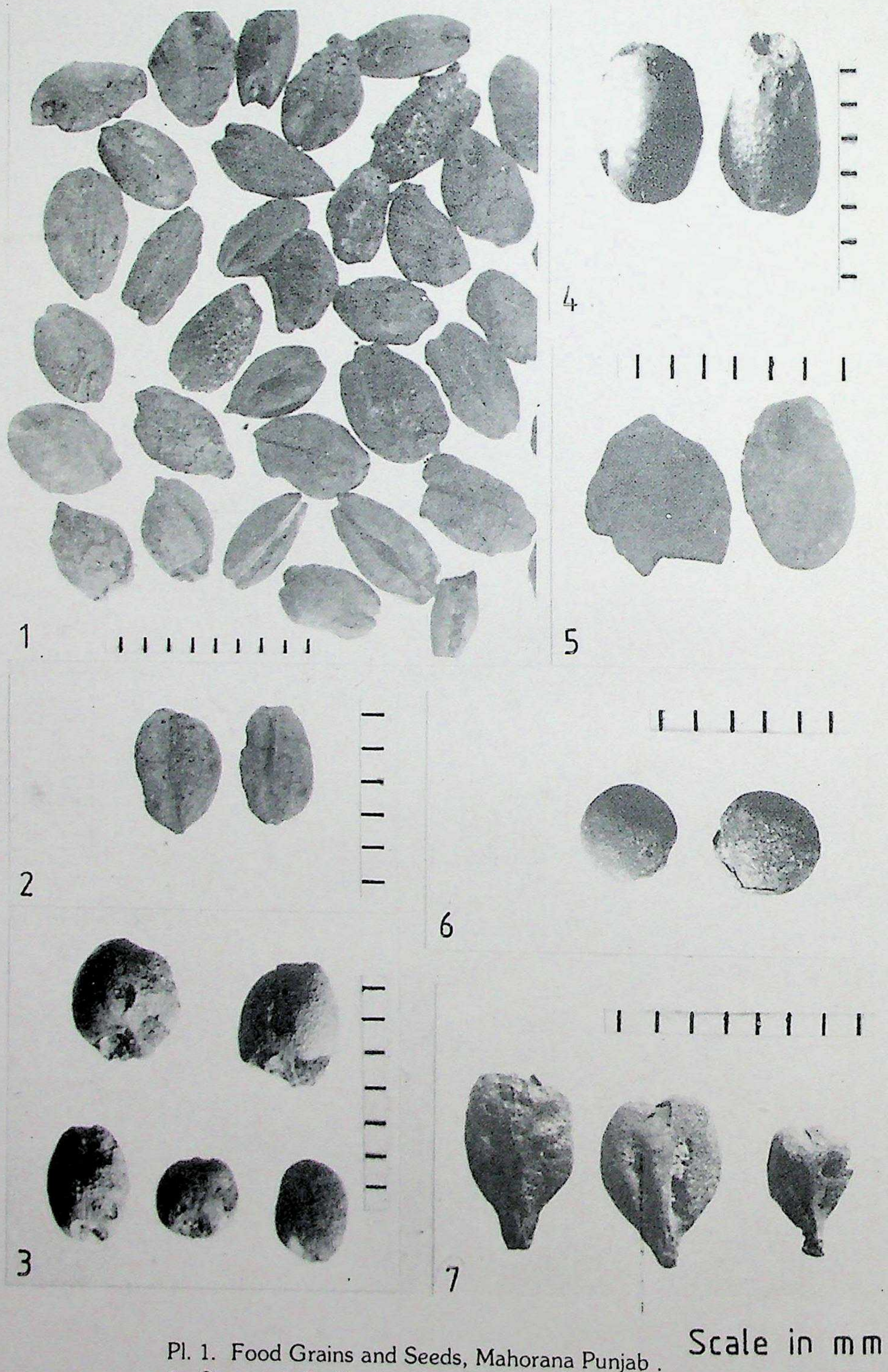
Pl. 1. Rectangular Houses, Inamgaon (Sharma)

Pl. 2. Yajna Kunda or Fire Pit (Sharma)

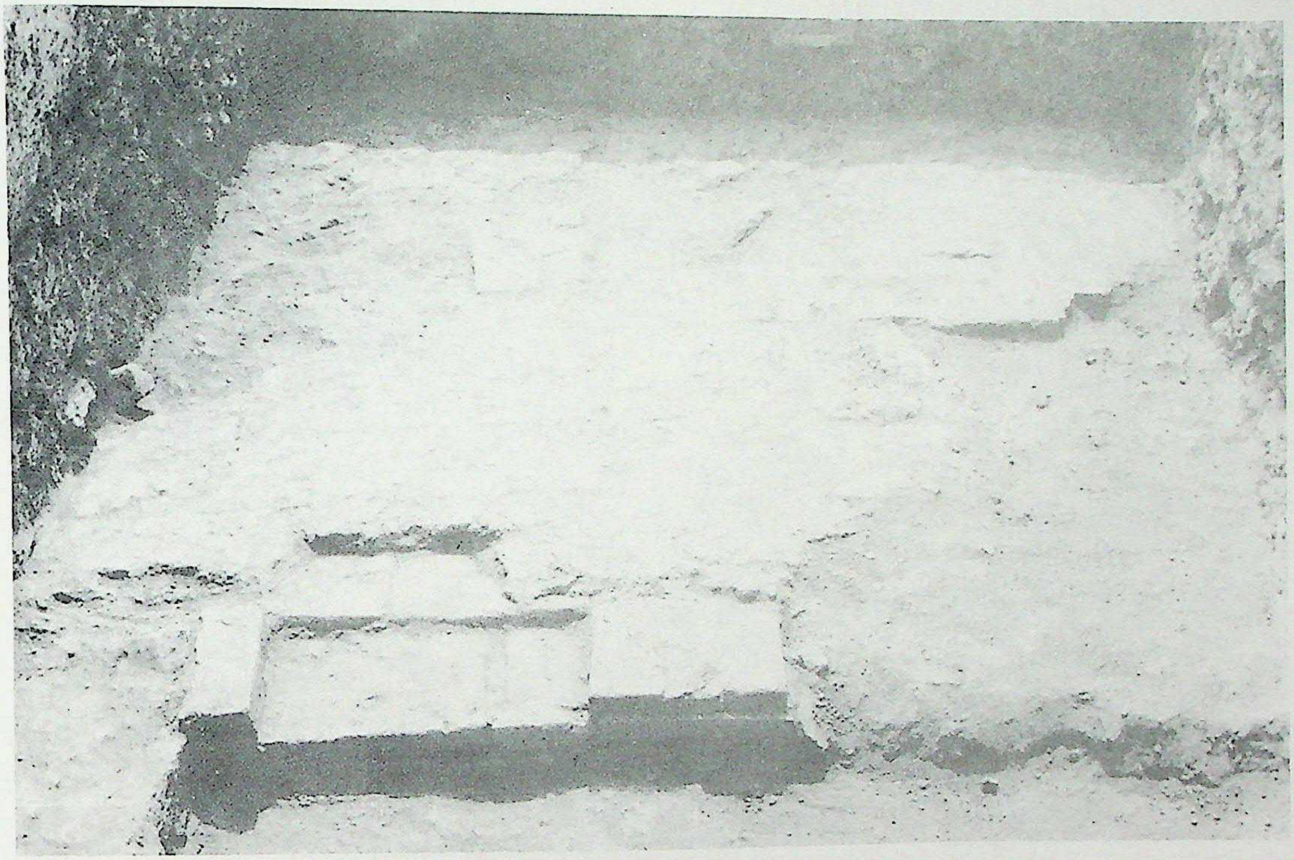




Pl. 3. Mutlimouthed Hearth (Sharma)



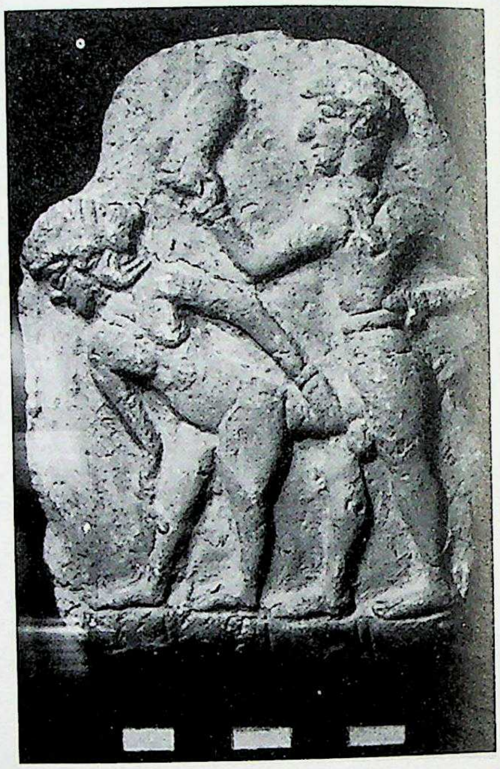
Pl. 1. Food Grains and Seeds, Mahorana Punjab .
1. Six-row hulled barley *(Hordeum Vulgare)*, 2. Naked barley *(Hordeum Vulgare Var. nudum)*, 3. Dwarf wheat *(Triticum Sphaero coccum)*, 4. Club wheat *(Triticum Compactum)*, 5. Cotyledons of hyacinth bean *(Lablabpur-purens)*, 6. Lentil *(Lens Culinaris)*, 7. Grape Seeds *(Vitis Vinifera)*. (Saraswat).



Pl. 1. Worn out floor of bricks with foundation wall, I, Radhan, Kanpur (Lal).

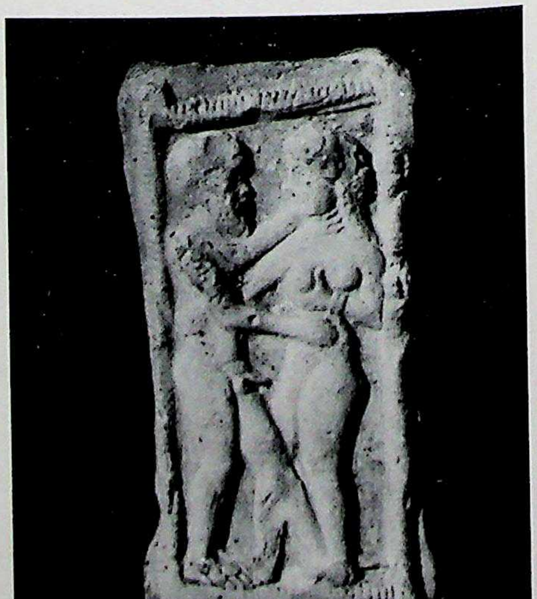
Pl. 2. Brick wall, Radhan, Kanpur (Lal).

Pl. 1. Terra-cotta plaque, Tell Hermal (Kala)

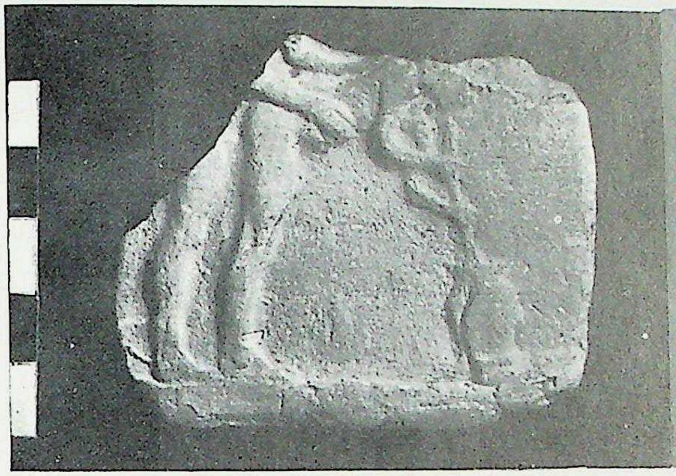


Pl. 2. Terra-cotta plaque, Tell Hermal (Kala)

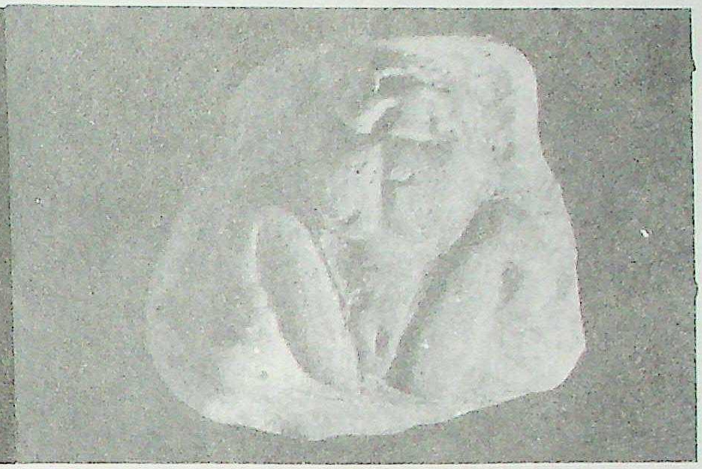
Pl. 3. Terra-cotta plaque, Tell Hermal (Kala)



Pl. 4. Terra-cotta plaque, from Susa (Kala)



Pl. 5. Terra-cotta piaque, Tell Hermal (Kala)



Pl. 6. Terra-cotta plaque, Kausambi

Pl. 7. Terra-cotta plaque, Sanatti Karnatak (Kala)

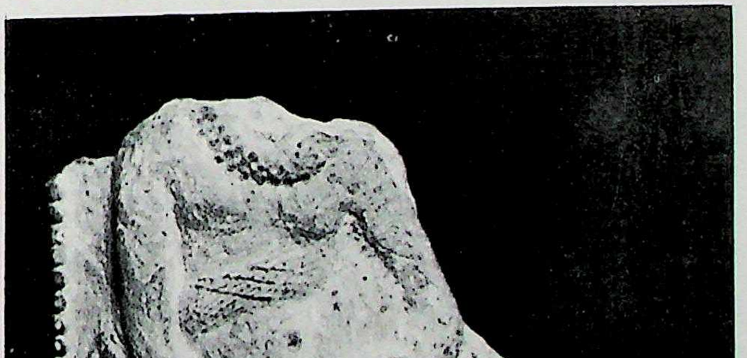
Pl. 8. Terra-cotta plaque, Chandraketugarh (Kala)

Pl. 9. Terra-cotta plaque, Tamluk (Kala)

Pl. 11. Terra-cotta plaque, Mathura (Kala)

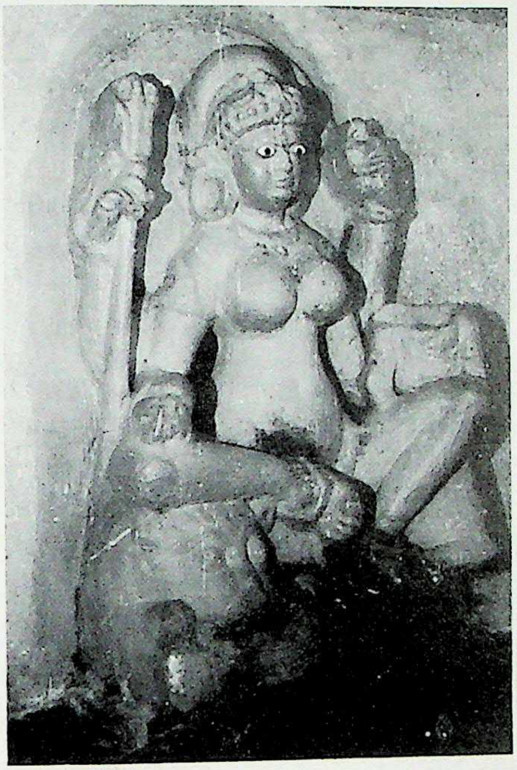
Pl. 10. Terra-cotta plaque, Mesopotamia (Kala)

Pl. 12. Terra-cotta plaque, West Bengal (?) (Kala)



Pl. 13. Terra-Cotta Plaque, Kausa,mbi (Kals)

Pl. 1. Sealing of Mahārāja Tila (Bhaṭṭa), (Kauśāmbī (Thapliyal)



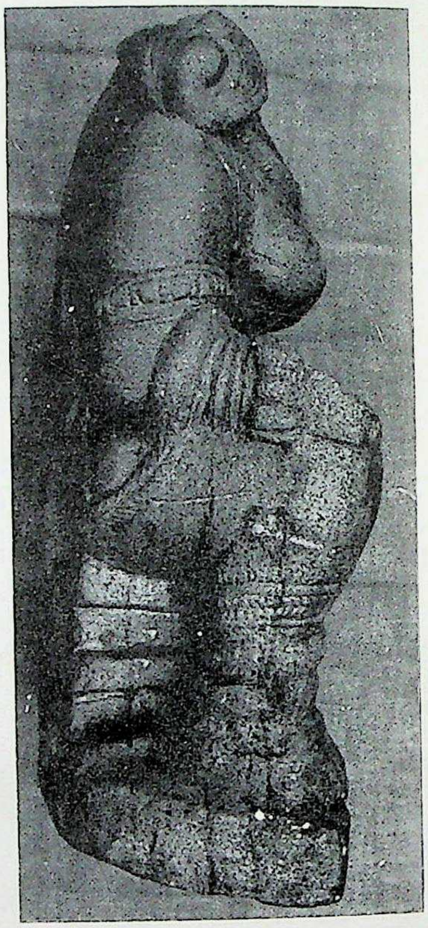
Pl.1. Simhavahini, Kamakkhya Devi Temple, Kamaccha, Varanasi, C.600 A.D.(Kumar)

Pl.2. The River Goddess Yamuna, Manmandir Ghat, Varanasi C.600-650 A.D. (Kumar)

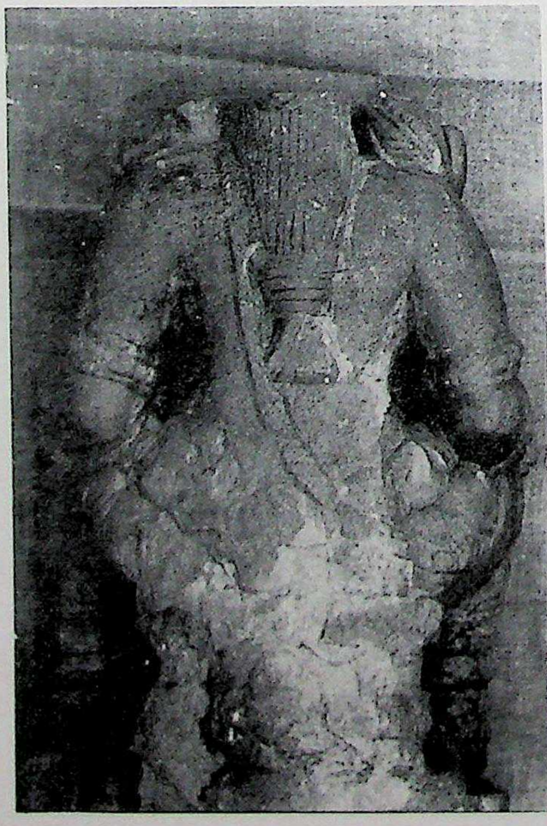
Pl.3. Siva-Parvati, Manmandir Ghat, Varanasi, C.600-650 A.D.(Kumar)

Pl.4. Bust of Surya, Bharat Kala Bhavan, Varanasi C.600-650 A.D. (Kumar)

a

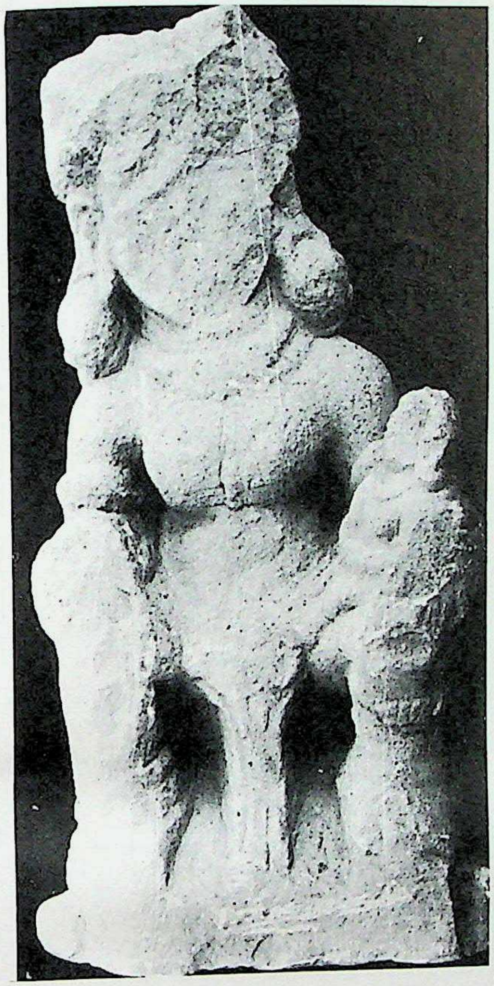


b



c

Pl. 1. Banavasi : A female deity (Hariti); a, Front view, b, side view and c. back view. (Sundara)

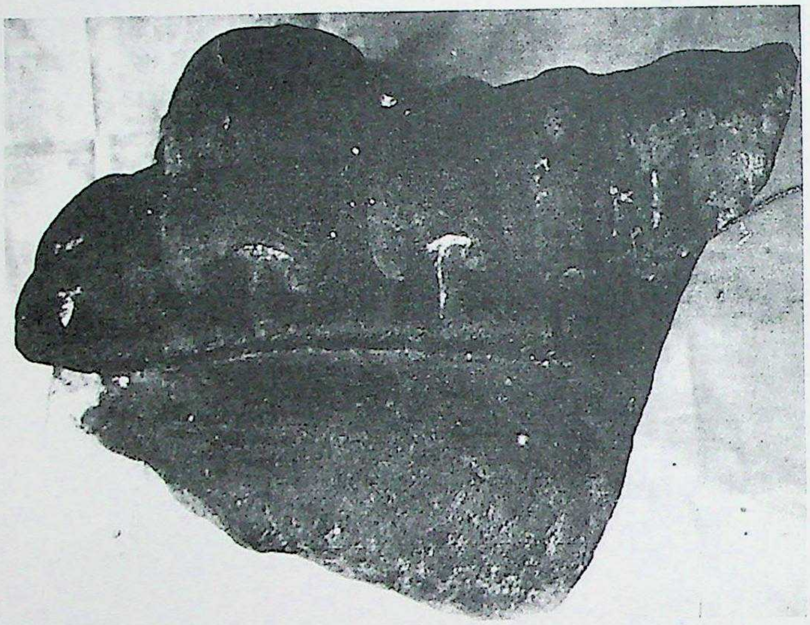


a

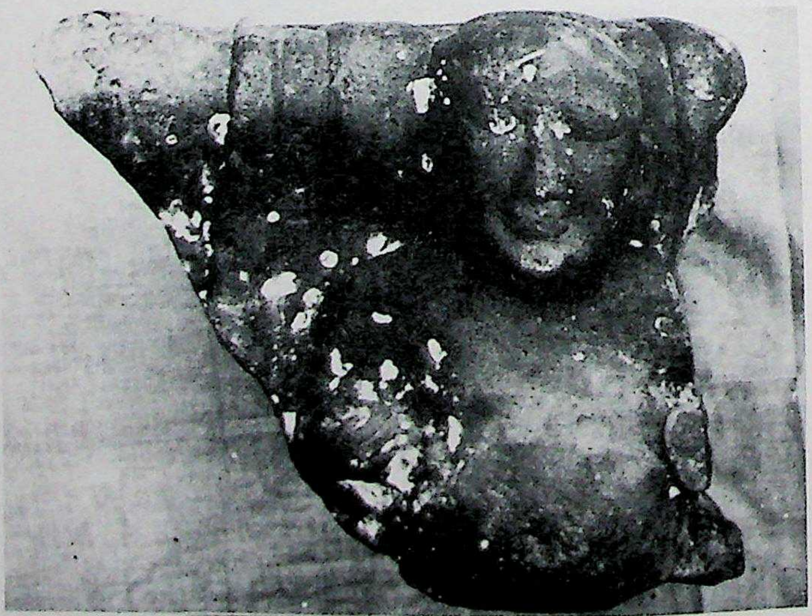
c

b

Pl. 2. Banavasi : Hariti (?); a, Front view, b, Top view, c, Back view. (Sundara).

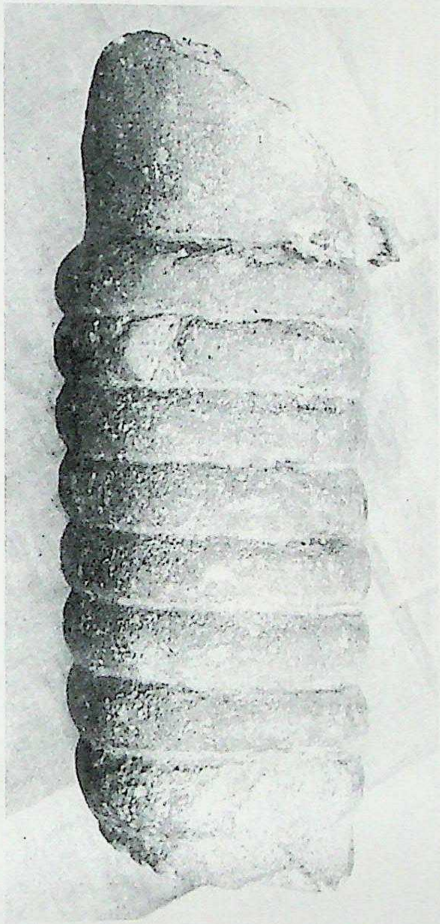


a

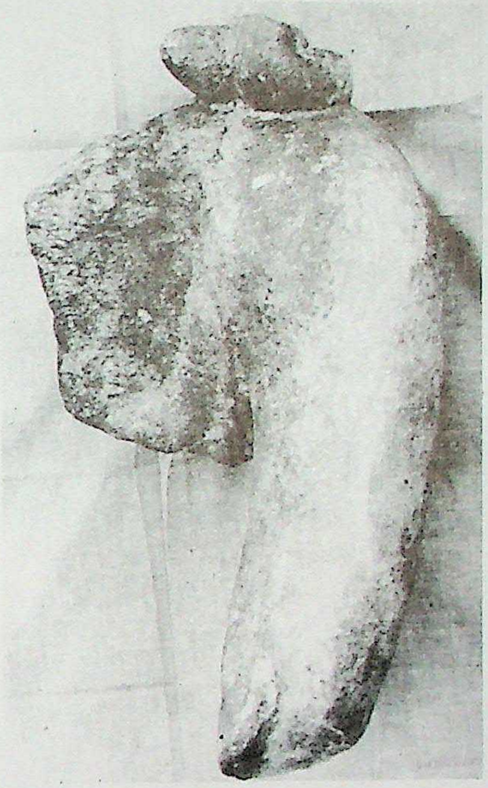


b

Pl. 3. Banavasi : The back support; a, Top part, b. Front left part with Kubja attendant. (Sundara).



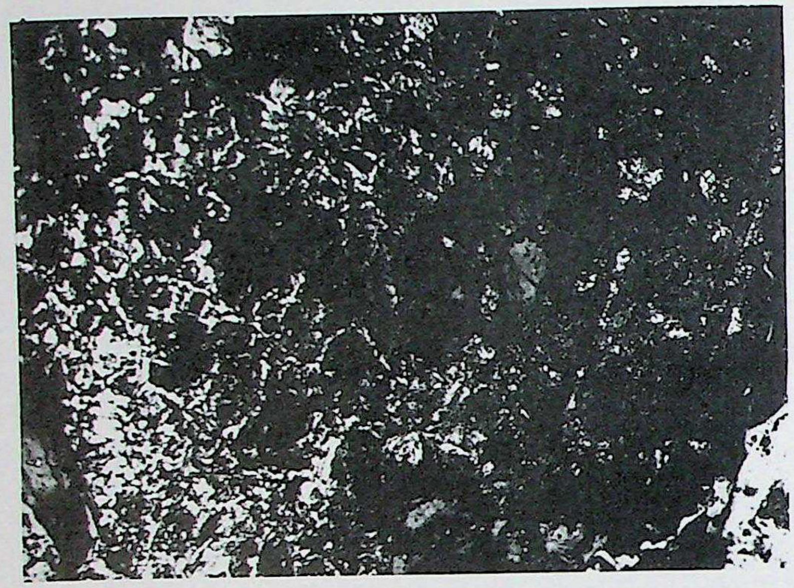
a



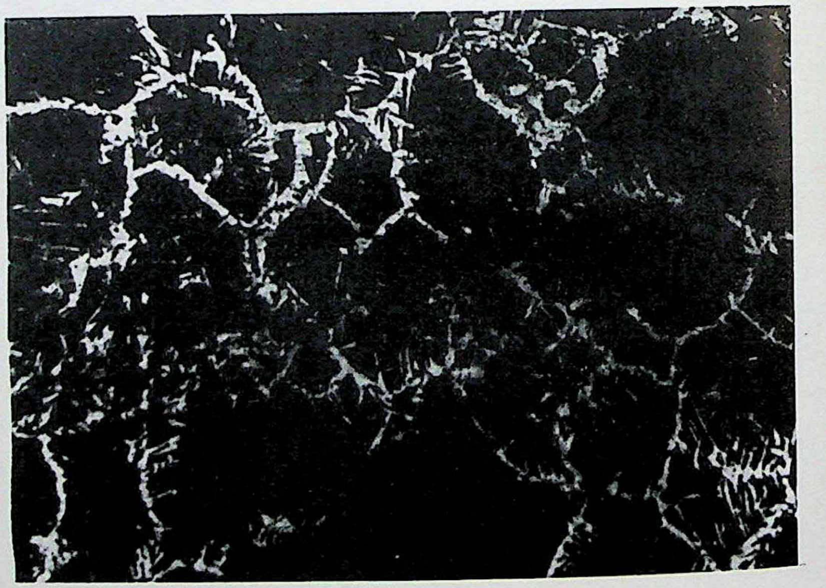
b

c

Pl. 4. Banavasi : a & c, The right arms with vritta valaya, b The left arm.

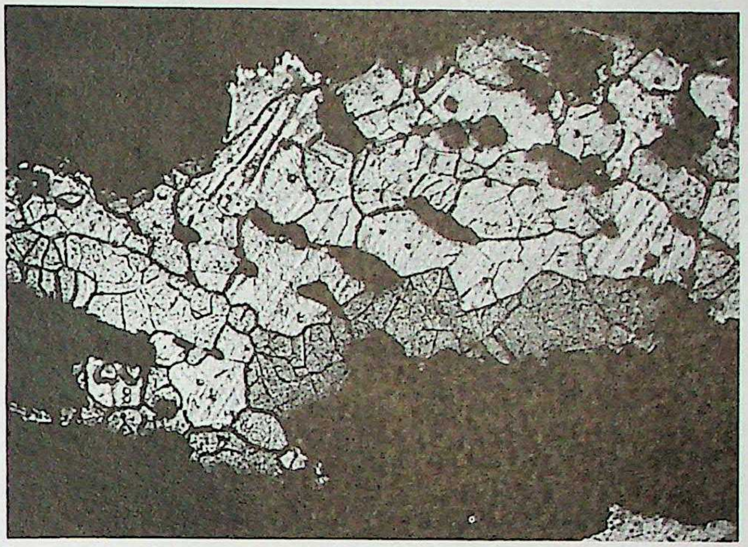


Pl. 2 The residual metal in the section from an axe lab no. Fe 188 showing low and high carbon content structure dispersed (pearlite structure), Etchant 2% Nital, 250 X. (Narain et al).



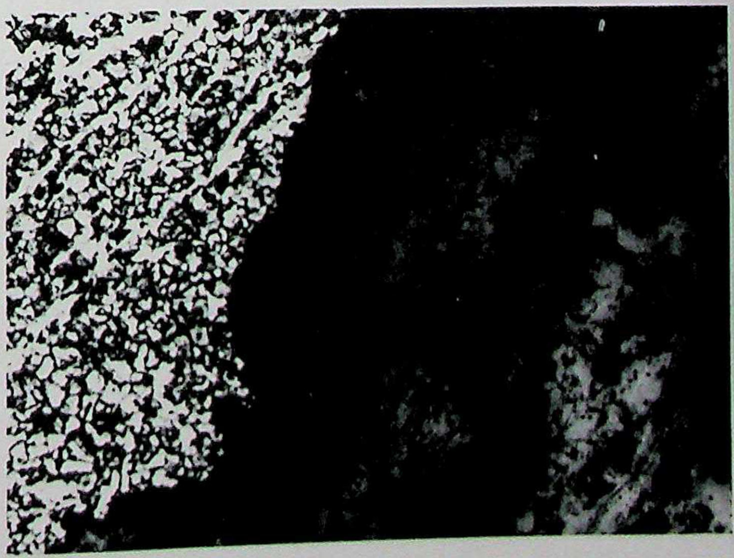
Pl. 3. The residual metal in the section from an axe lab no. Fe 187 showing pearlite with ferrite streaks (Hypo entectoid steel), Etchant 2% Nital, 250 X. (Narain et al).

Pl. 4. The residual metal in the section from knife lab no. Fe 189, showing medium and high carbon steel structure (fine pearlite), Etchant 2% Nital, 250 X. (Narain et al).



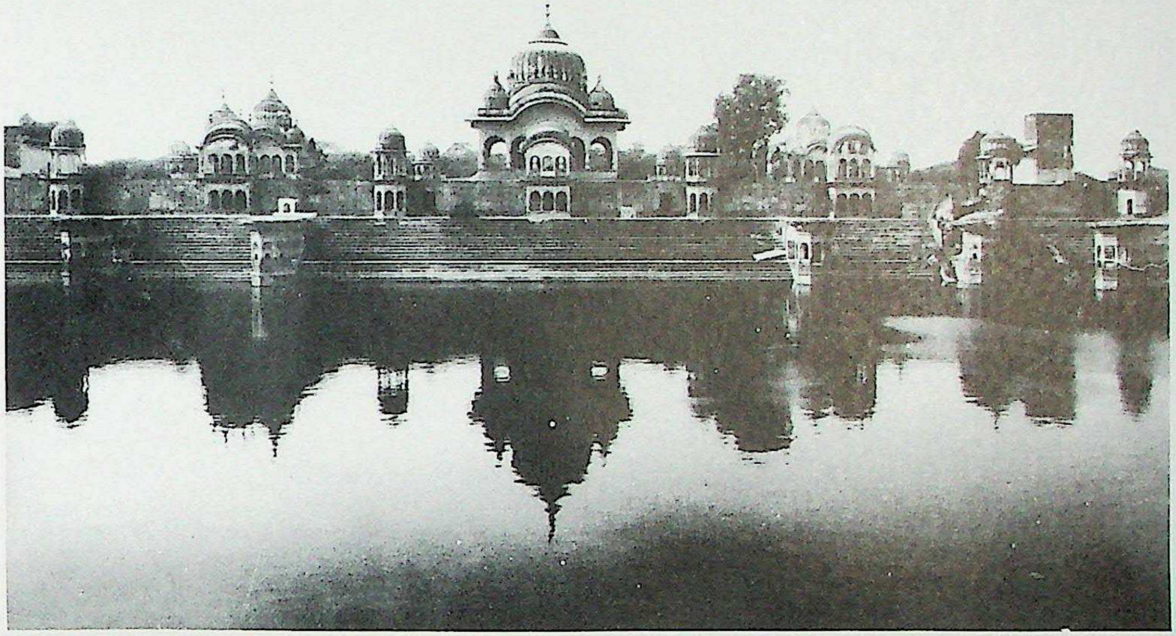
Pl. 5. Another residual metal area showing ferritic structure in the section from knife, Etchant 2% Nital, 250 X. (Narain et al)

Pl. 6. Relic carbide structure in the mineralized metal in the same sections from knife, Etchant 5% Nital, 500 X. (Narain et al).

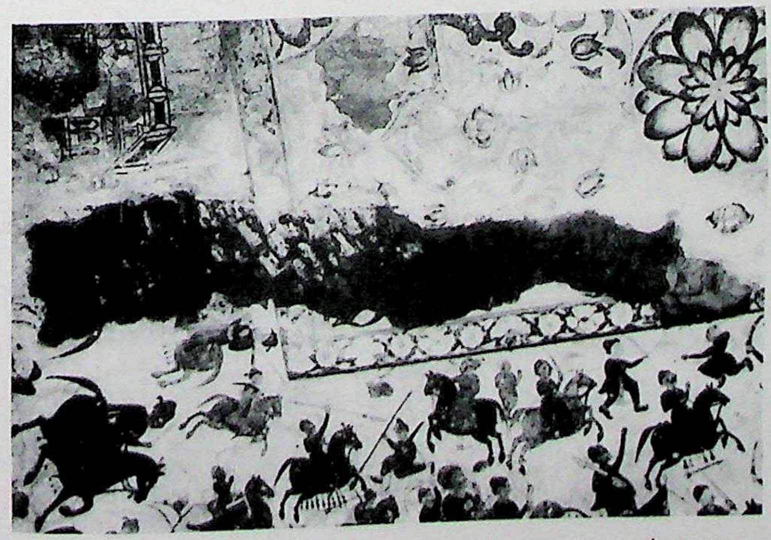


Pl. 7. The residual metal in the sections from spear head lab no. Fe 190 showing equiaxed grains of ferrite and fine pearlite Etchant 2% Nital, 500 X. (Narain et al).

Pl. 1. The four iron artifacts, comprising two axes I-II, lab no. Fe 188, III. Knife lab no. Fe 189 and IV. Spearhead lab no. Fe 190 from Sooron site, pd 600 B.C.-100 A.D. (Narain, et al).

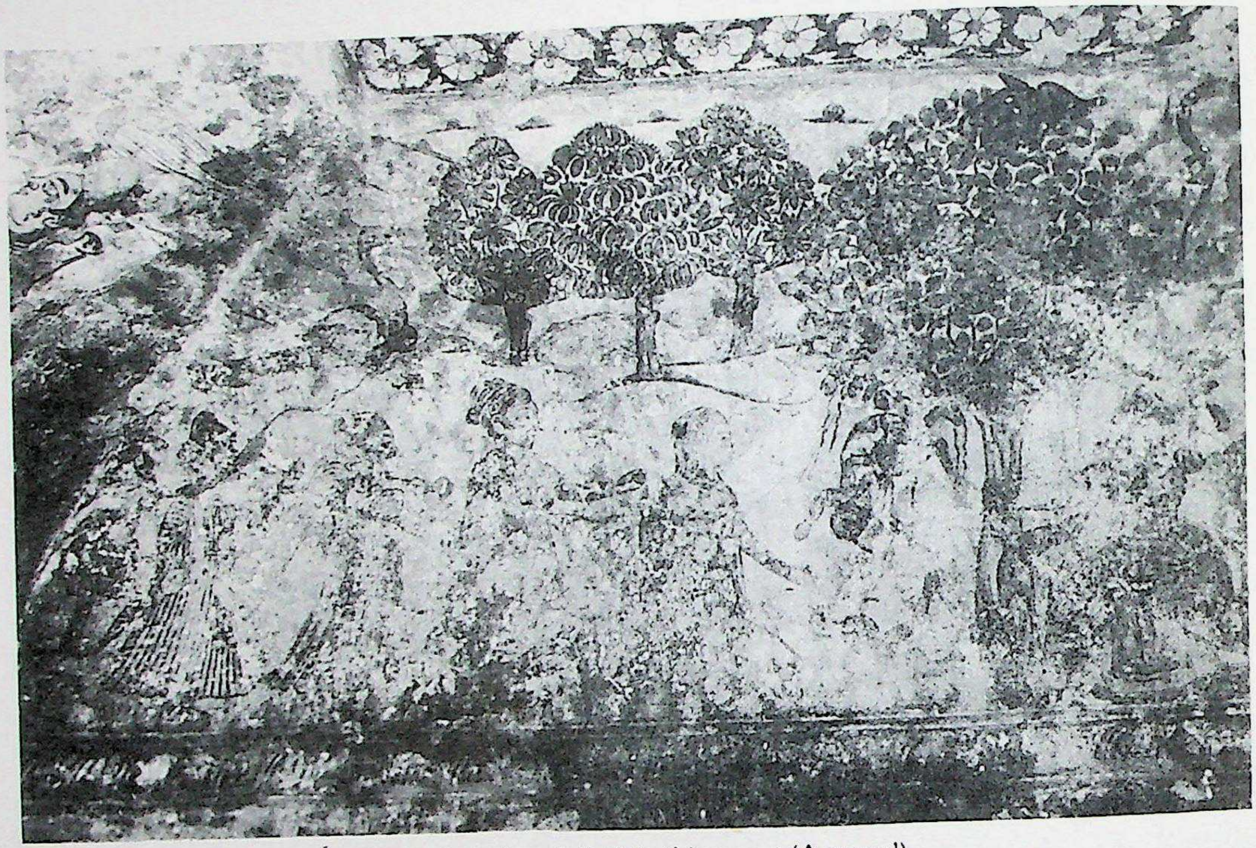


Pl. 1. A general view of the Kusum Sarovar, Govardhan (Agrawal)

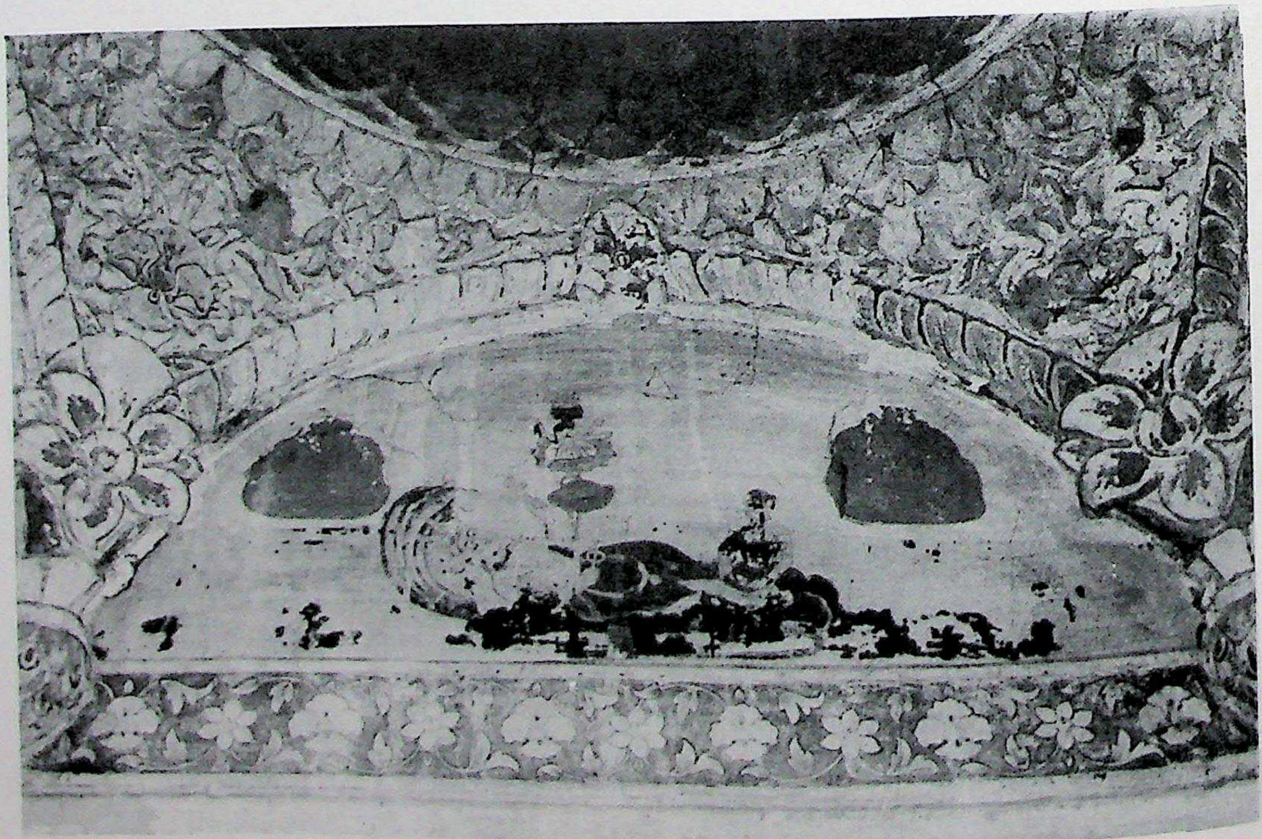


Pl. 2. An area where plaster has fallen producing lacuna (Agrawal)

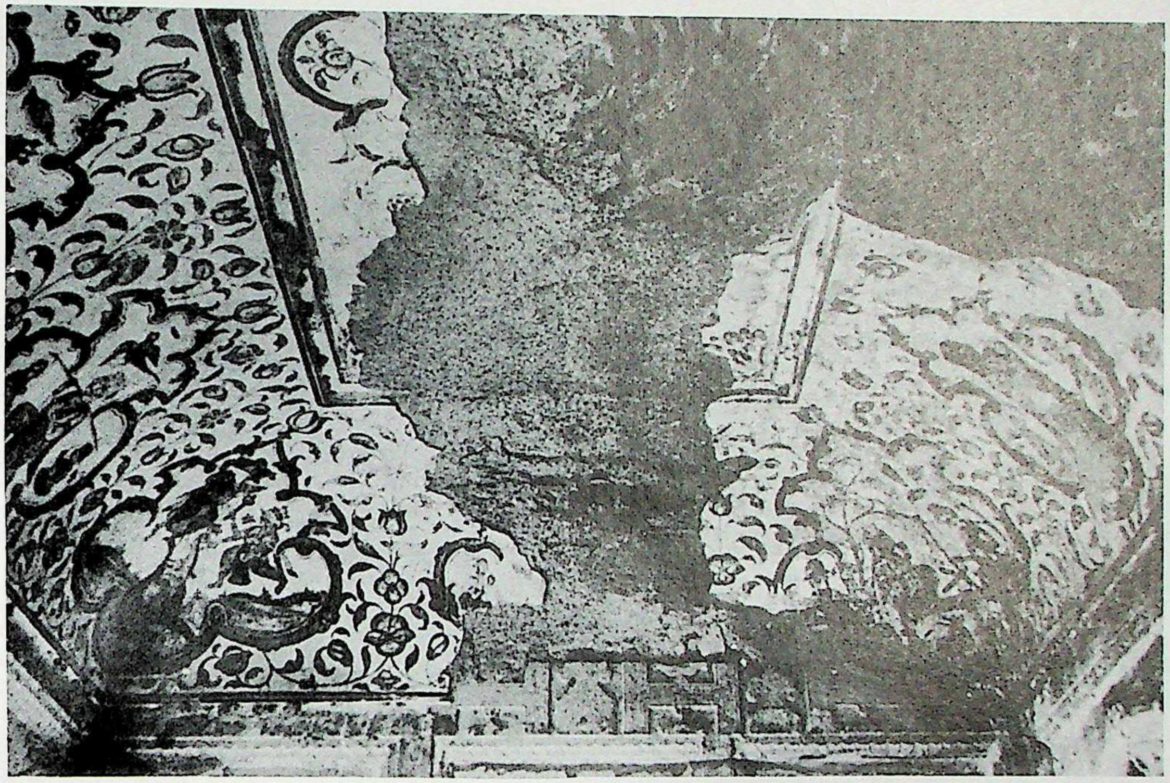
Pl. 3. A crack has appeared in the wall (Agrawal)



Pl. 4. Paint has flaked in this panel (Agrawal)

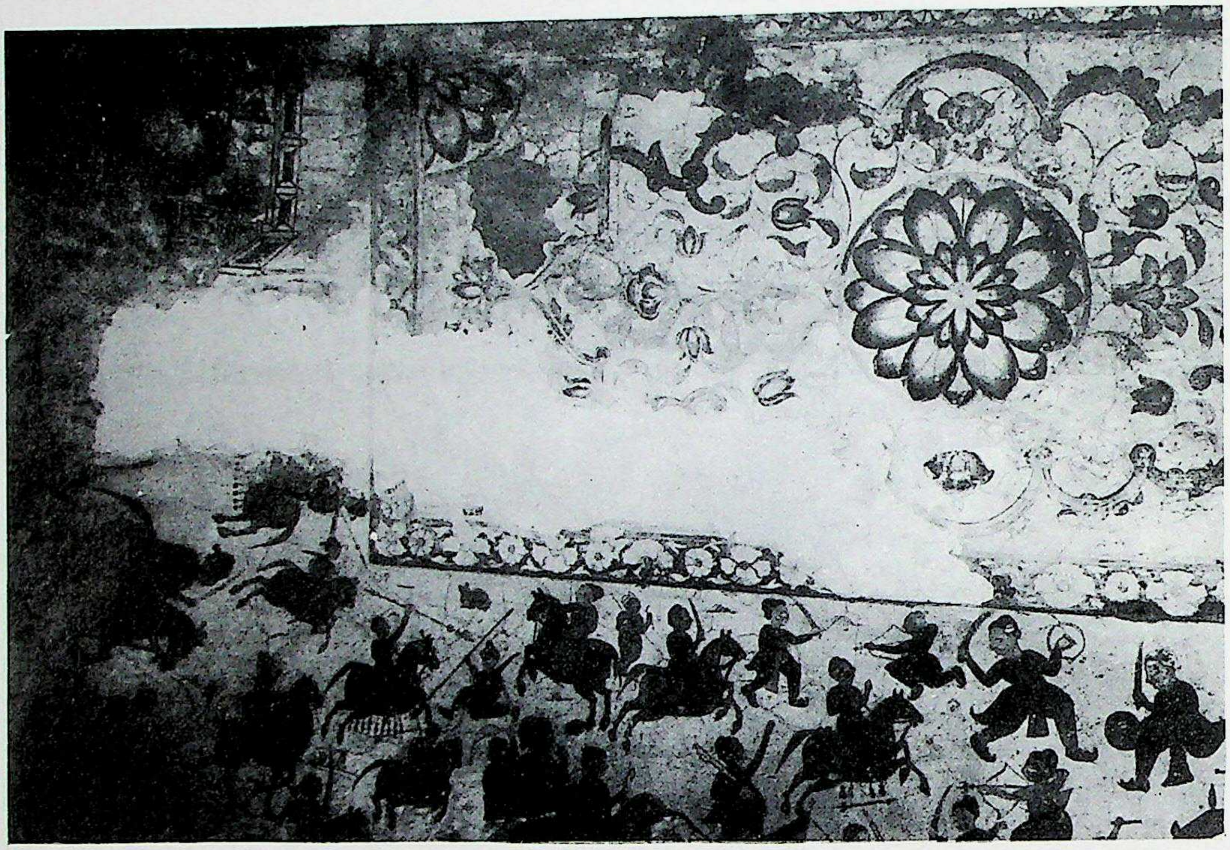


Pl. 5. There is profuse flaking of paint (Agrawal)

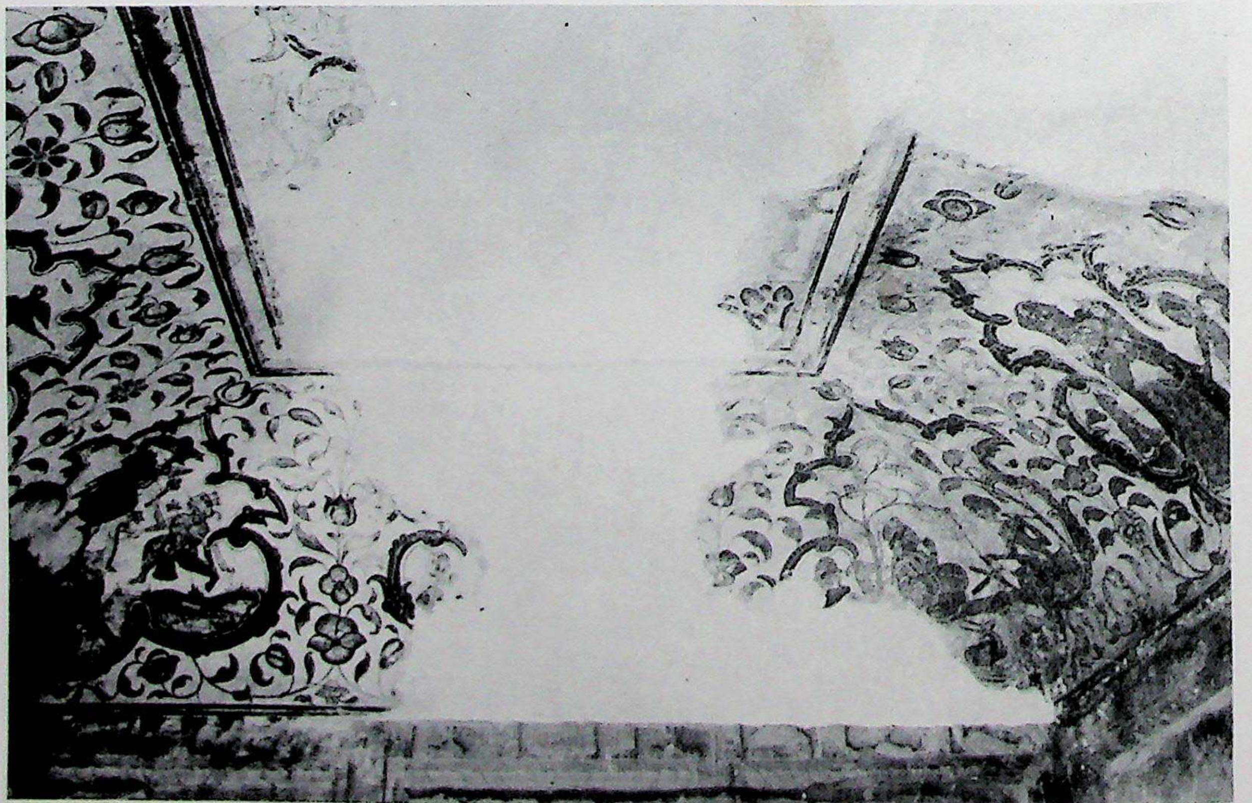


Pl. 6. Large chunks of plaster have fallen from several walls or ceilings (Agrawal)

Pl. 7. Chhatries of Rani Lakshmi and Rani Hansia (Agrawal)



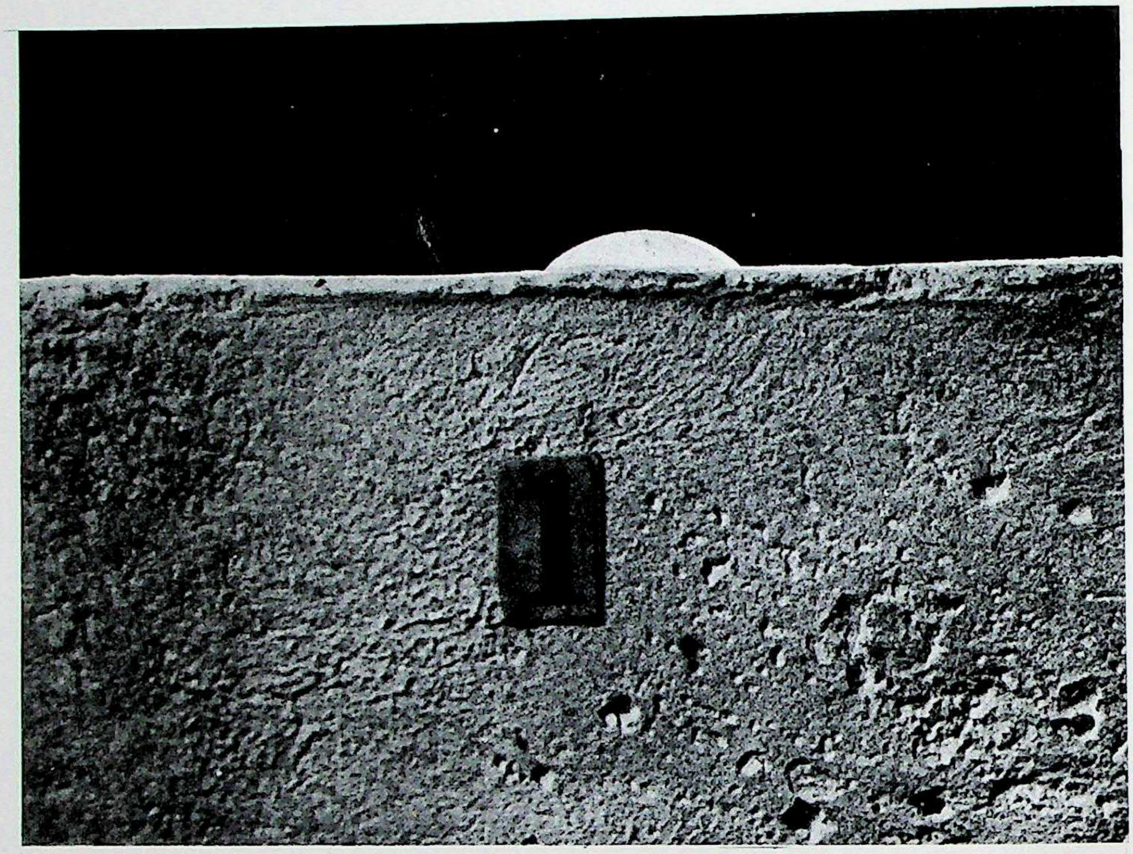
Pl. 8. The same area of wall as in Figure 2 after filling the lacuna (Agrawal)



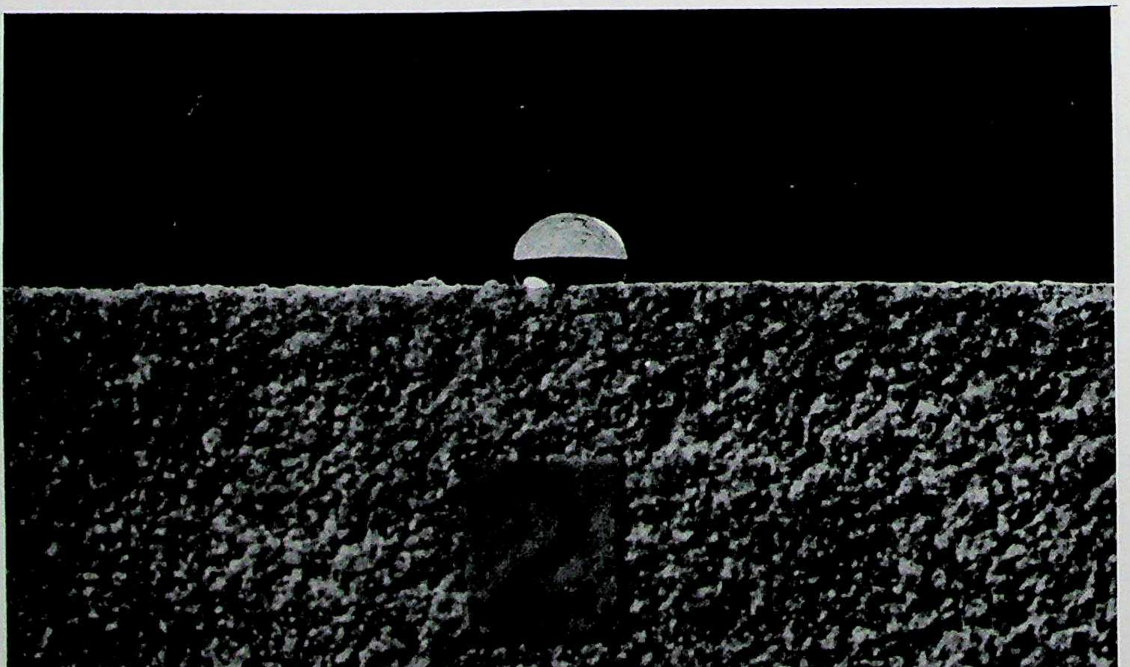
Pl. 9. The area of the ceiling shown in figure 6 from where a large chunk of plaster had fallen after repairing (Agrawal)

Pl. 10. A painting before restoration (Agrawal)

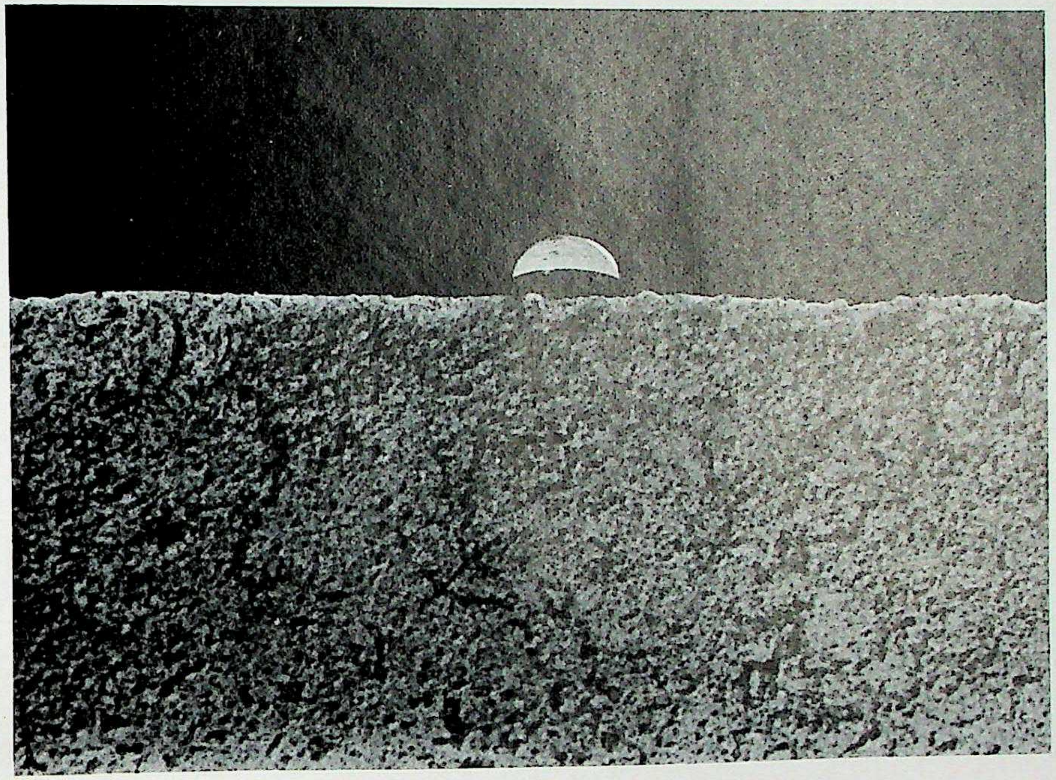
Pl. 11. The same painting after restoration. (Agrawal)



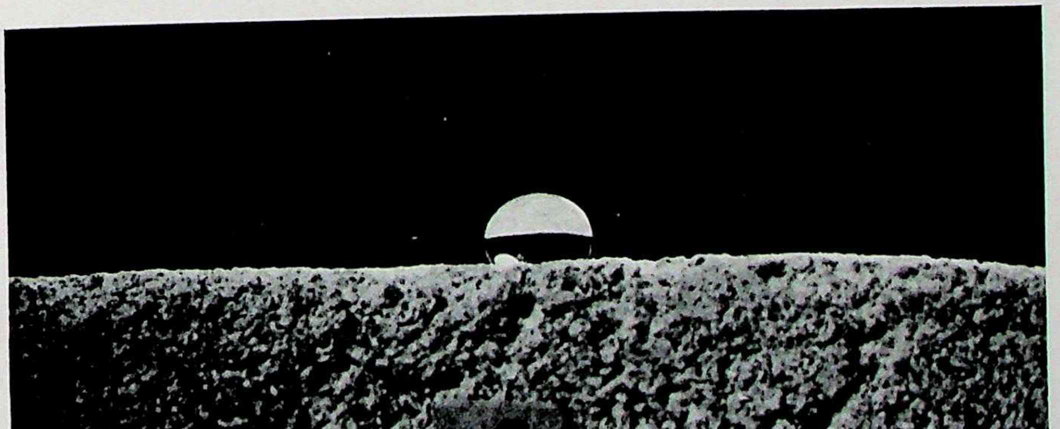
Pl. 1. Water drop on the surface of lime sample
(Singh, M. et al)



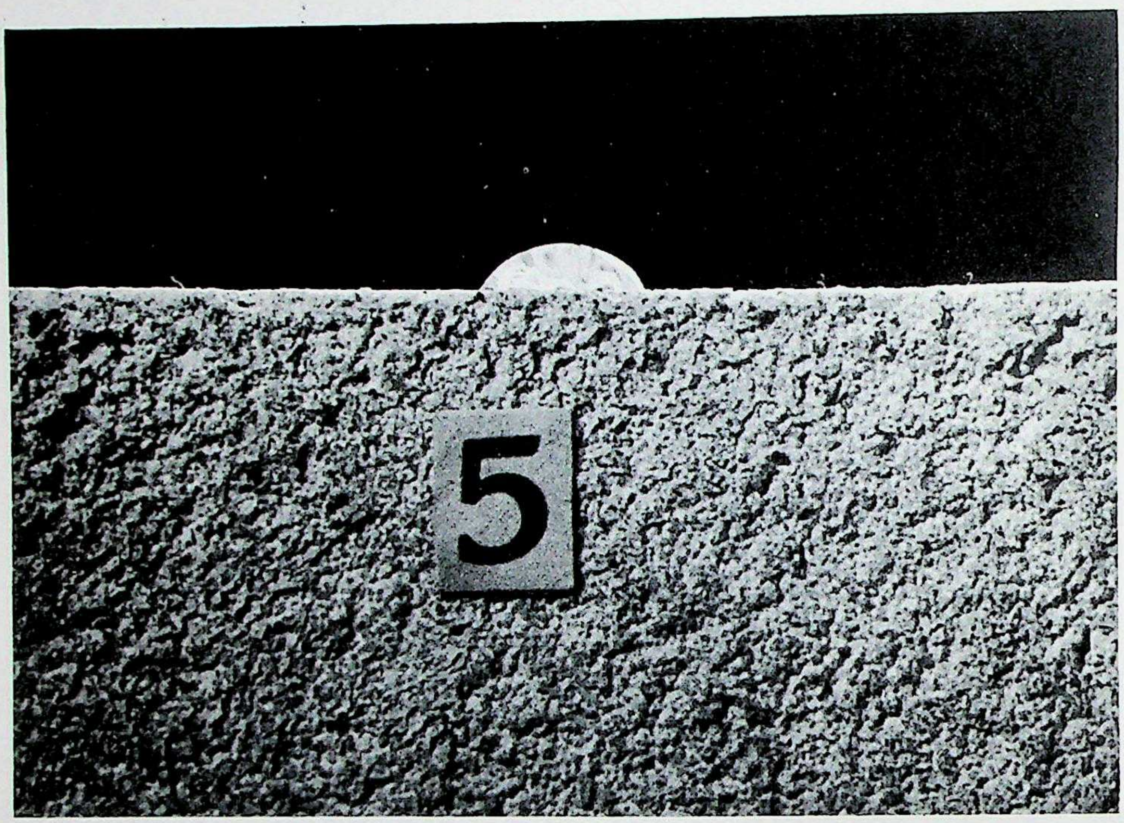
Pl. 2. Water drop on the surface of lime + sand sample
(Singh. M. et al)



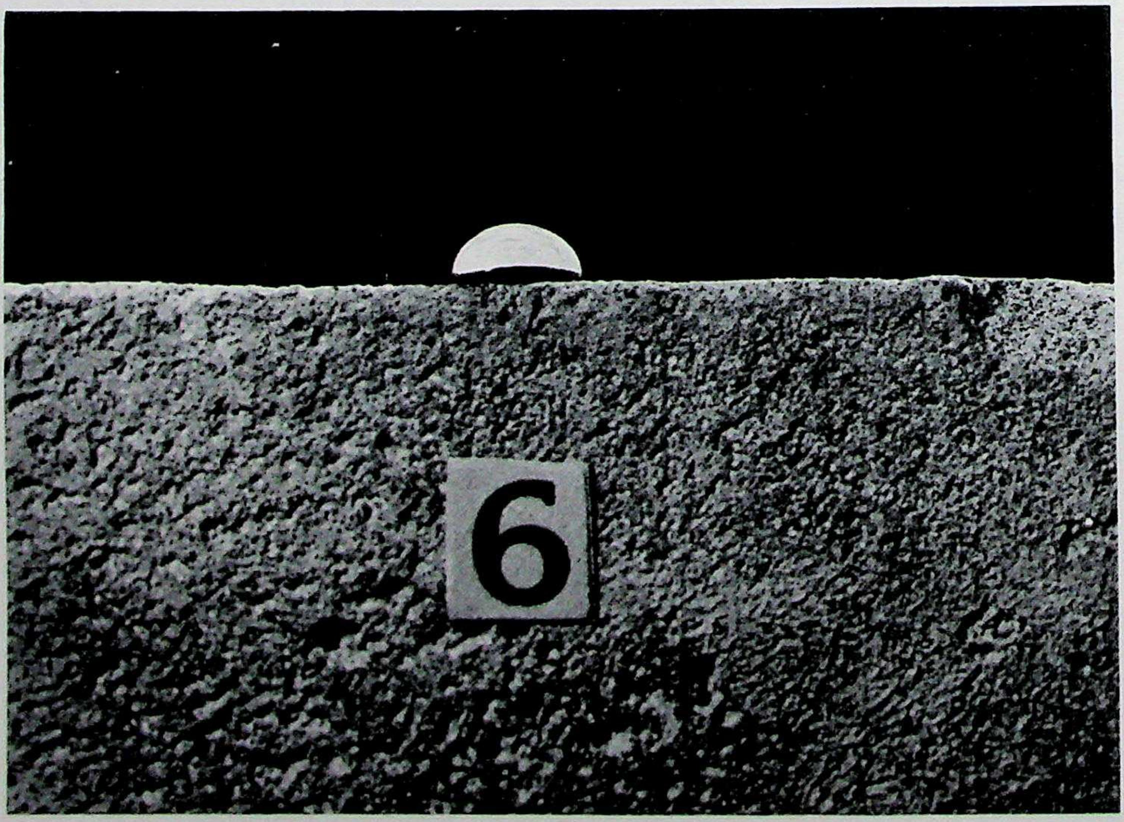
Pl. 3. Water drop on the surface of lime + sand + Urd dal sample (Singh. M. et al)



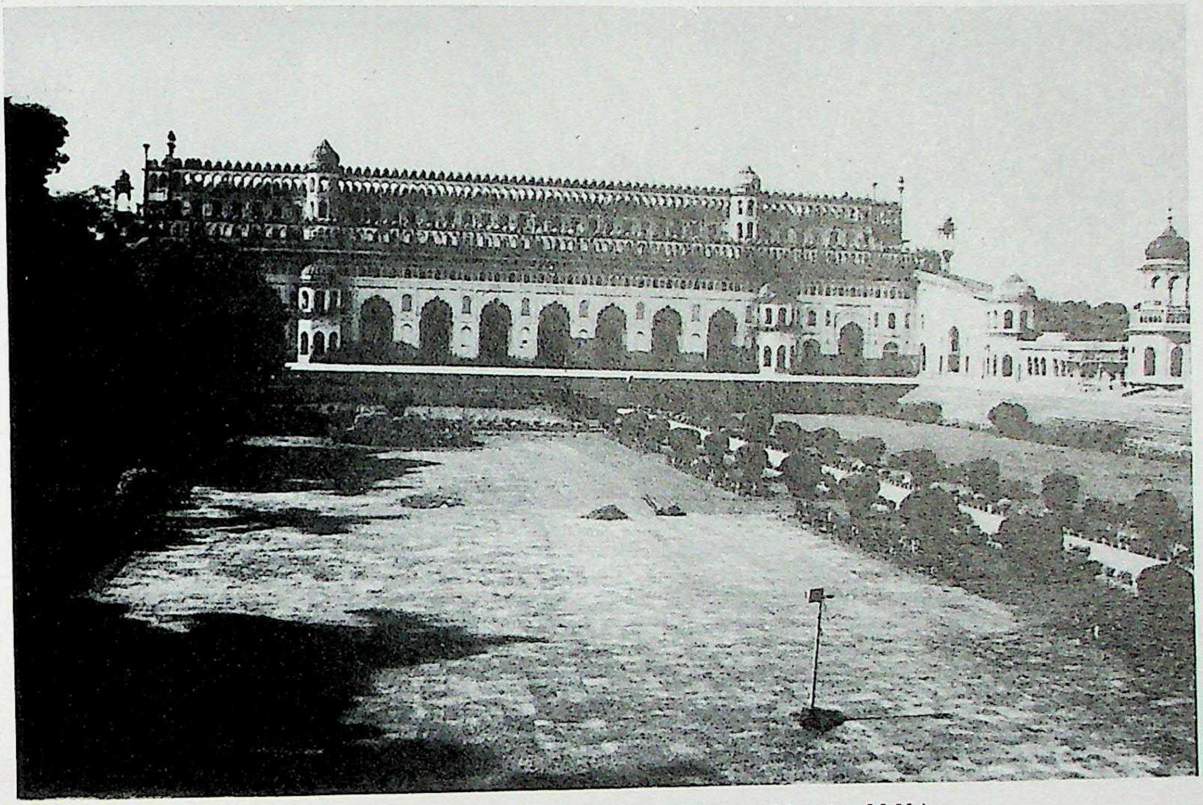
Pl. 4. Water drop on the surface of lime + sand + Neem oil sample (Singh. M. et al)



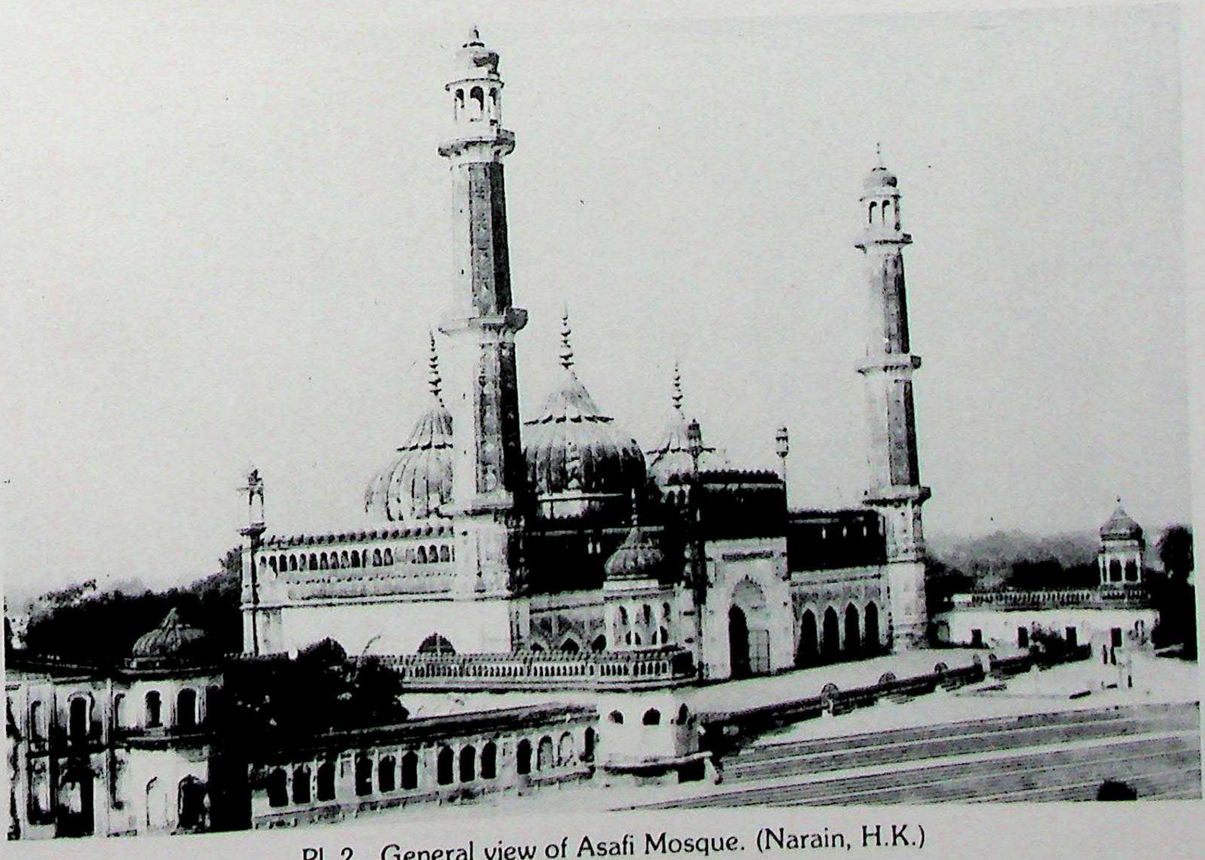
Pl. 5. Water drop on the surface of lime + sand + casein sample (Singh. M. et al)



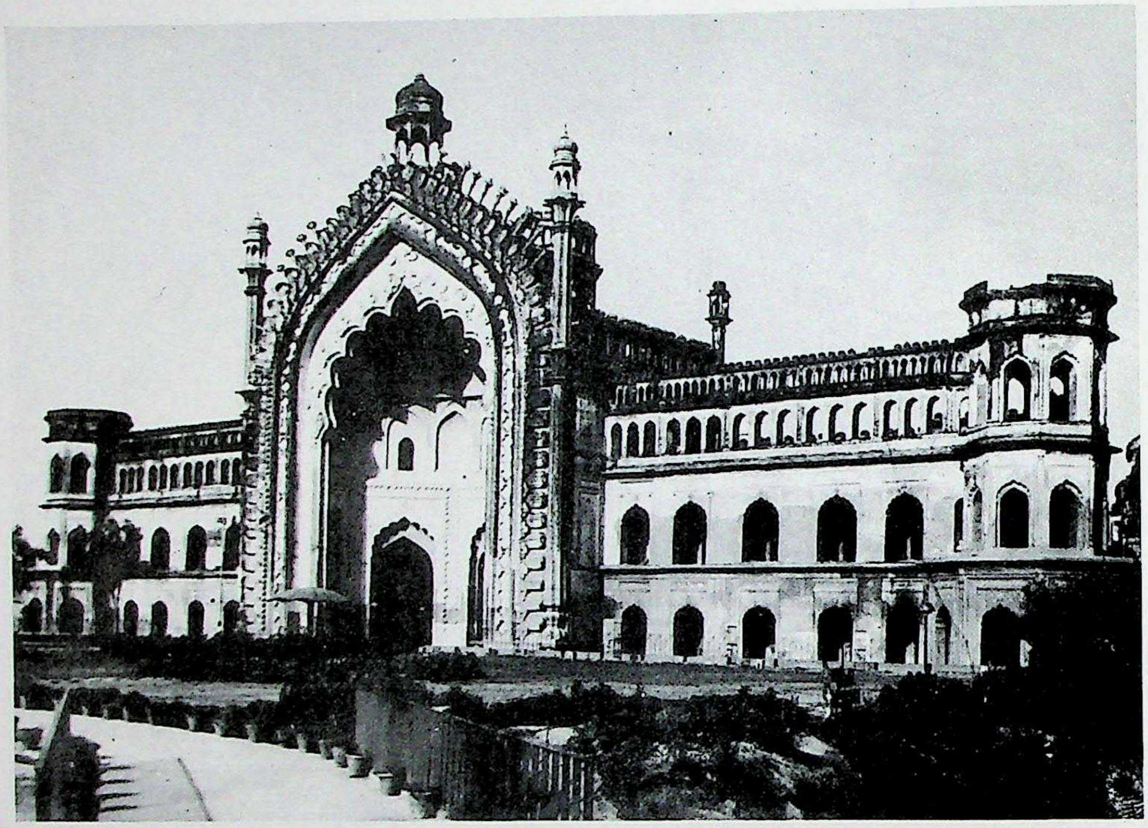
Pl. 6. Water drop on the surface of lime + sand + Bel pulp sample (Singh. M. et al)



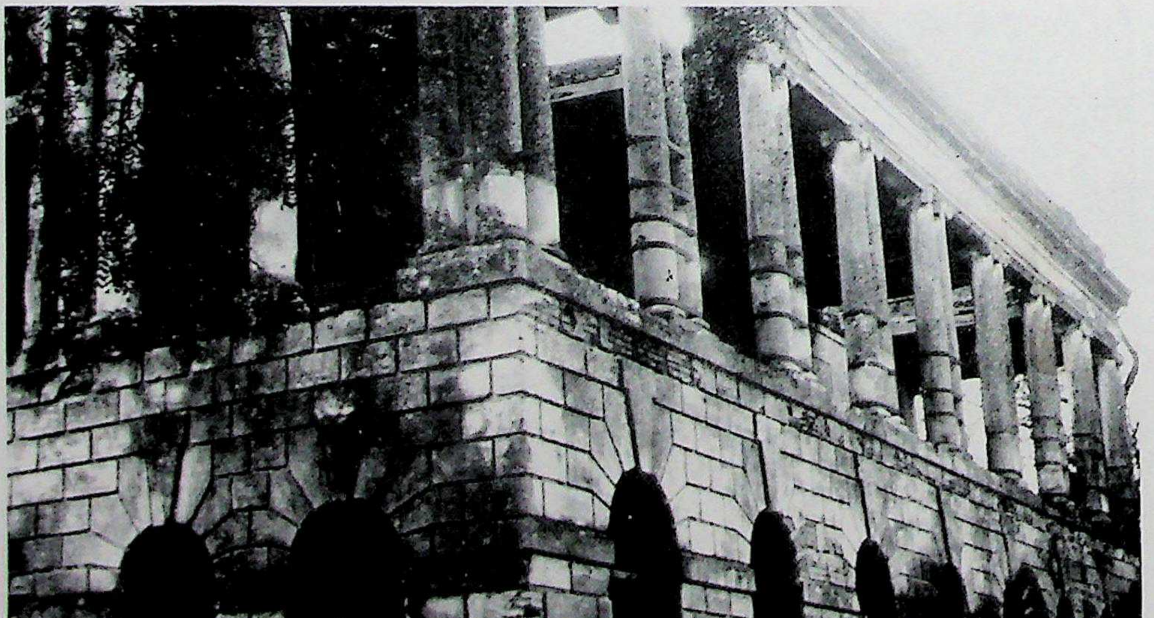
Pl. 1. General view of Asafi Imambara (Narain, H.K.)



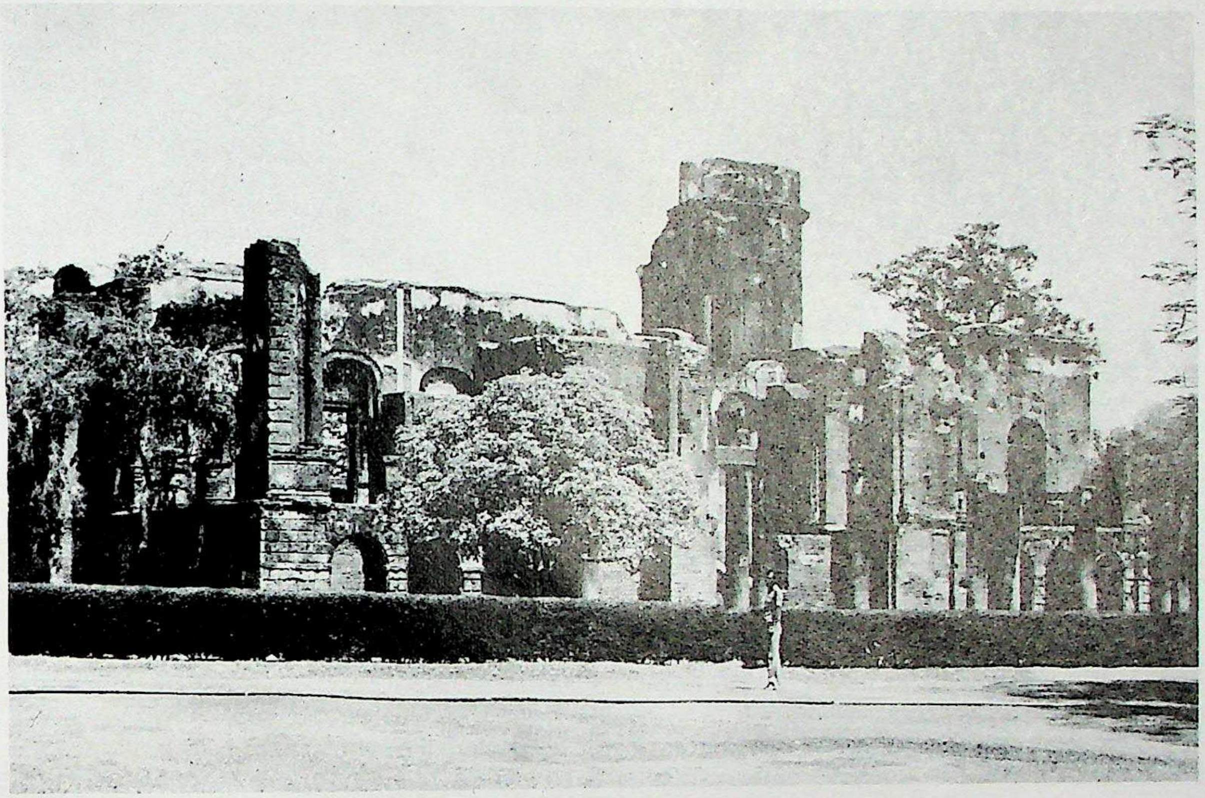
Pl. 2. General view of Asafi Mosque. (Narain, H.K.)



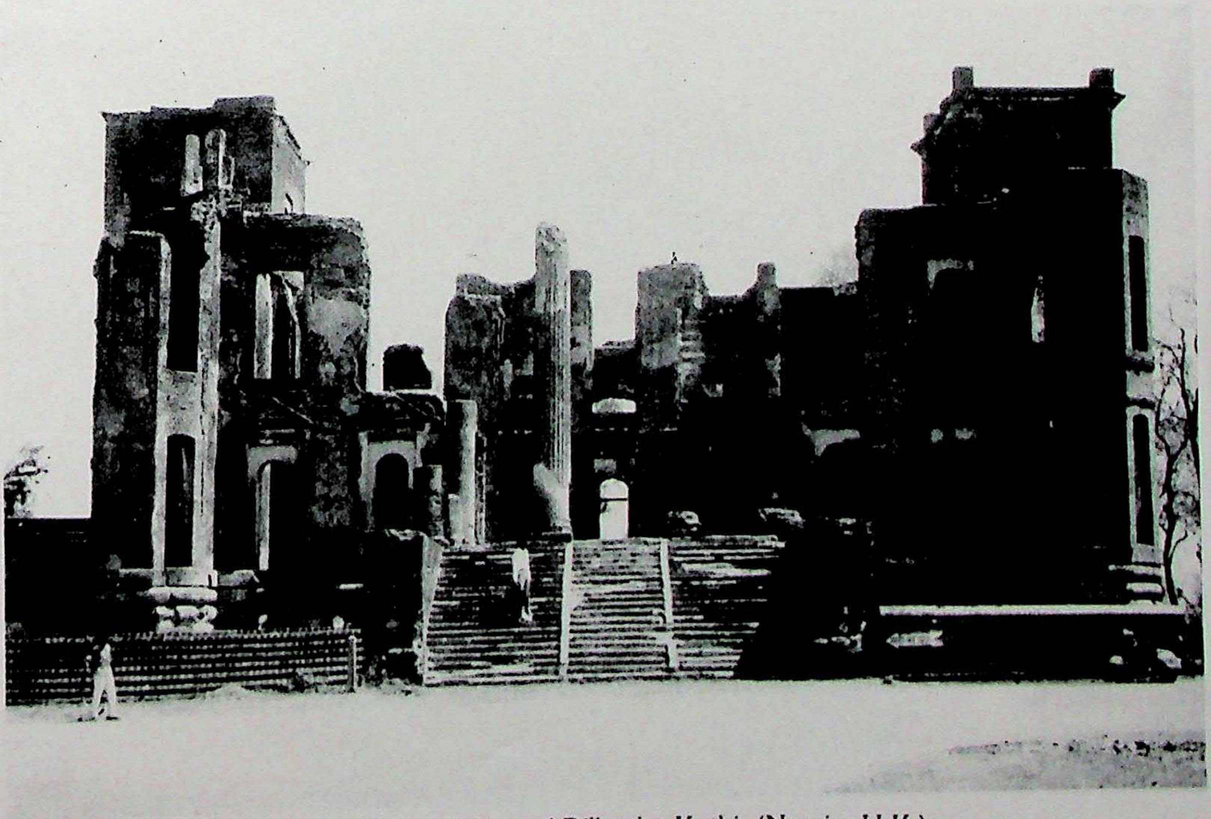
Pl. 3. General view of Rumi Gate. (Narain, H.K.)



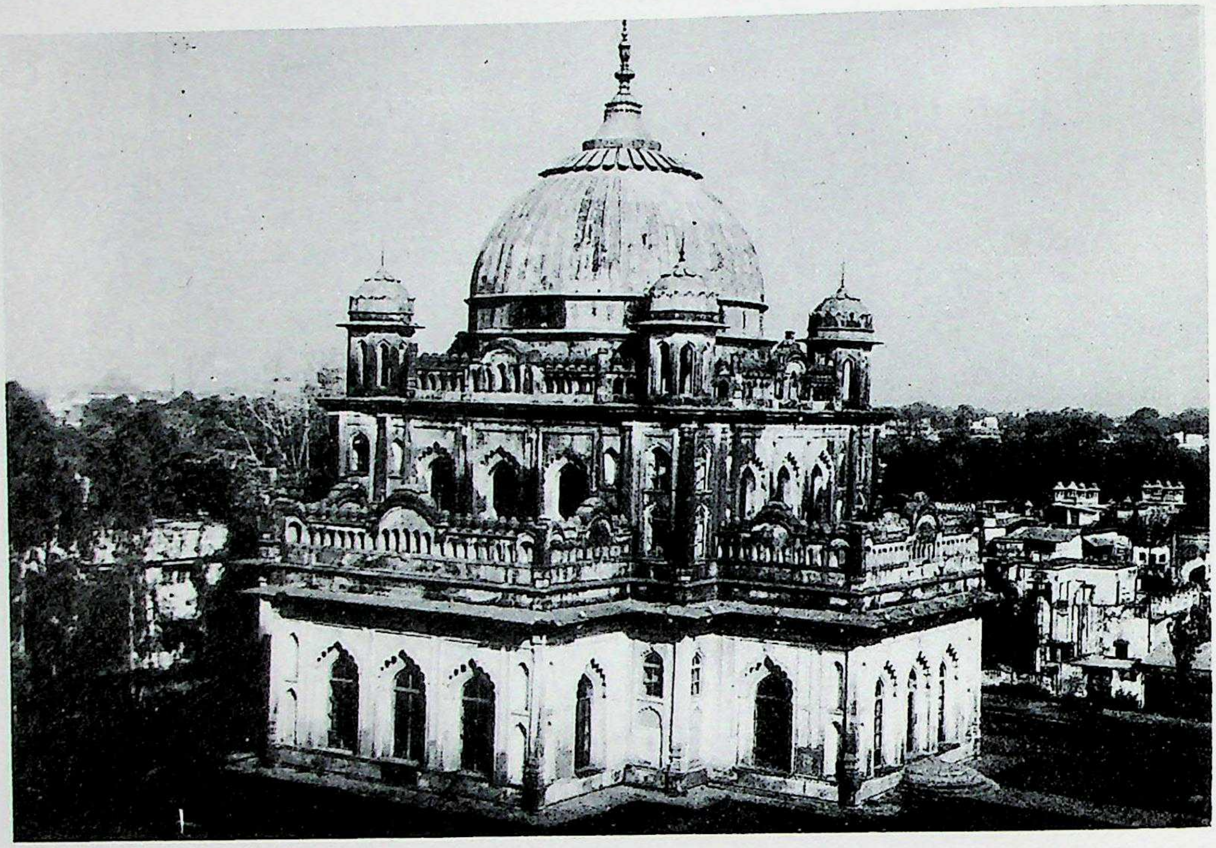
Pl. 4. Bibiapur **Kothi** (Narain, H.K.)



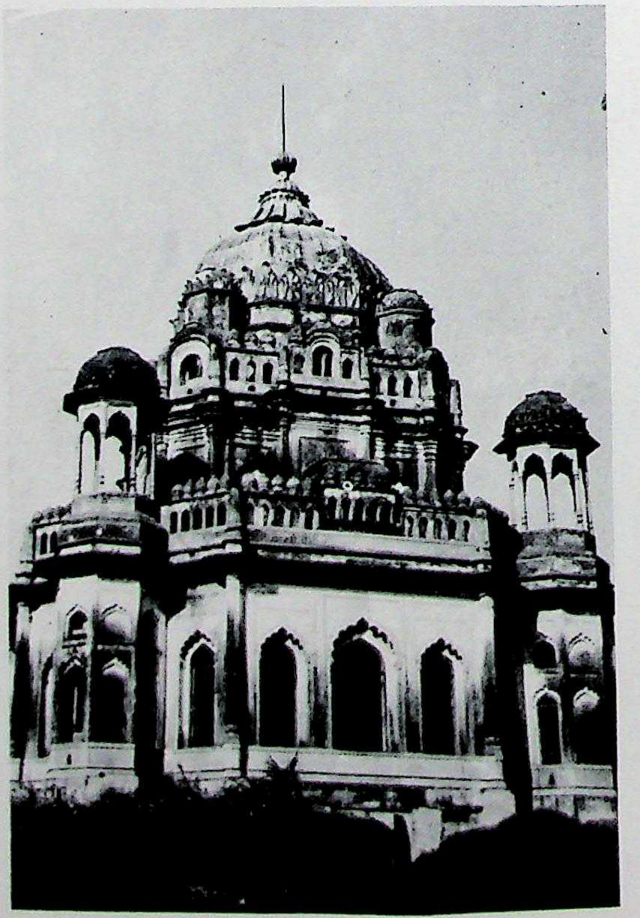
Pl. 5. General view of Residency; Main Building. (Narain, H.K.)



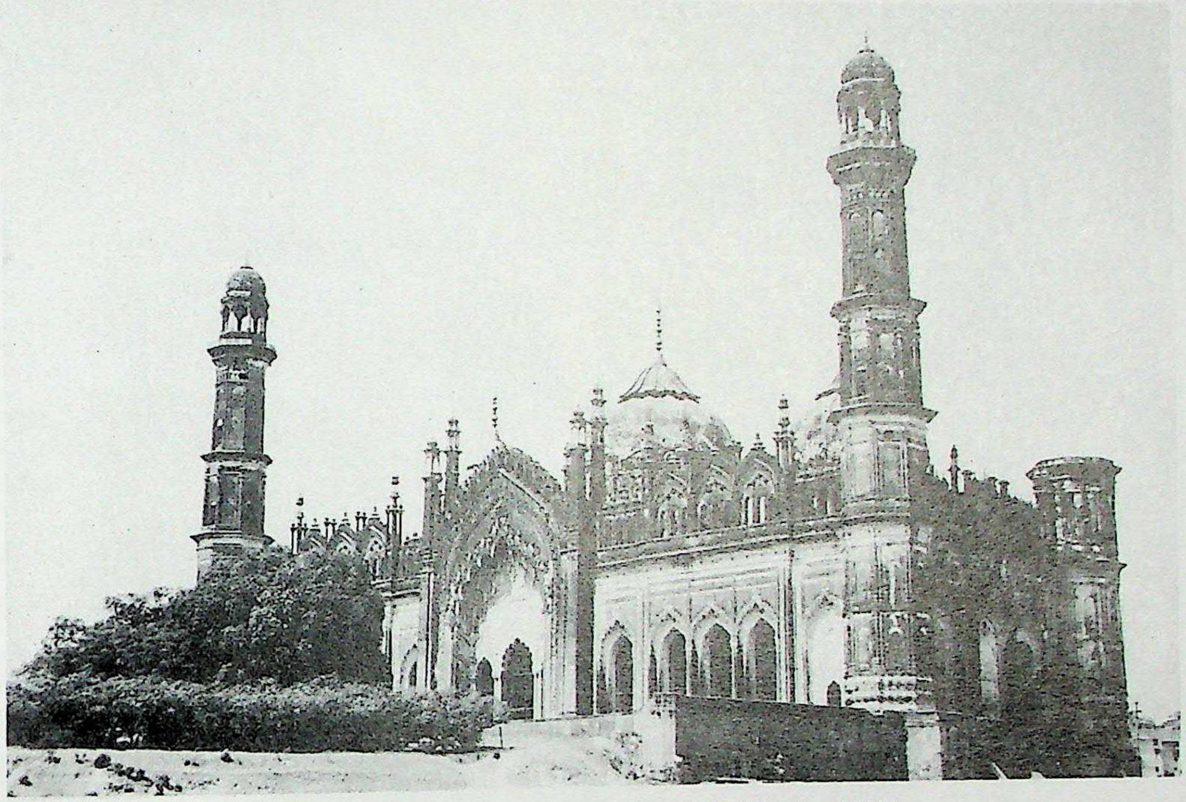
Pl. 6. General view of Dilkusha Kothi. (Narain, H.K.)



Pl. 7. General view of Nawab Saadat Ali Khan's tomb (Narain, H.K.)

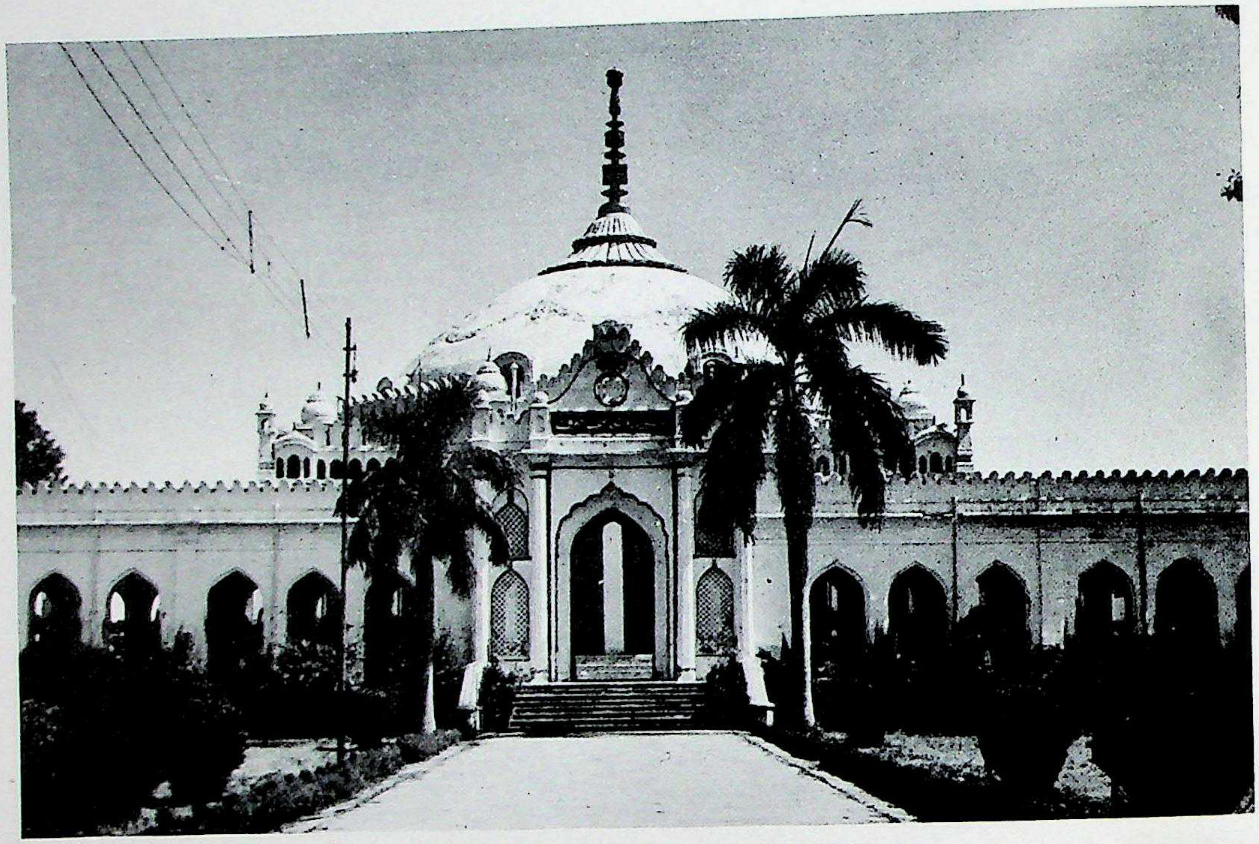


Pl. 8. General view of Tomb of Mushirzadi. (Narain, H.K.)



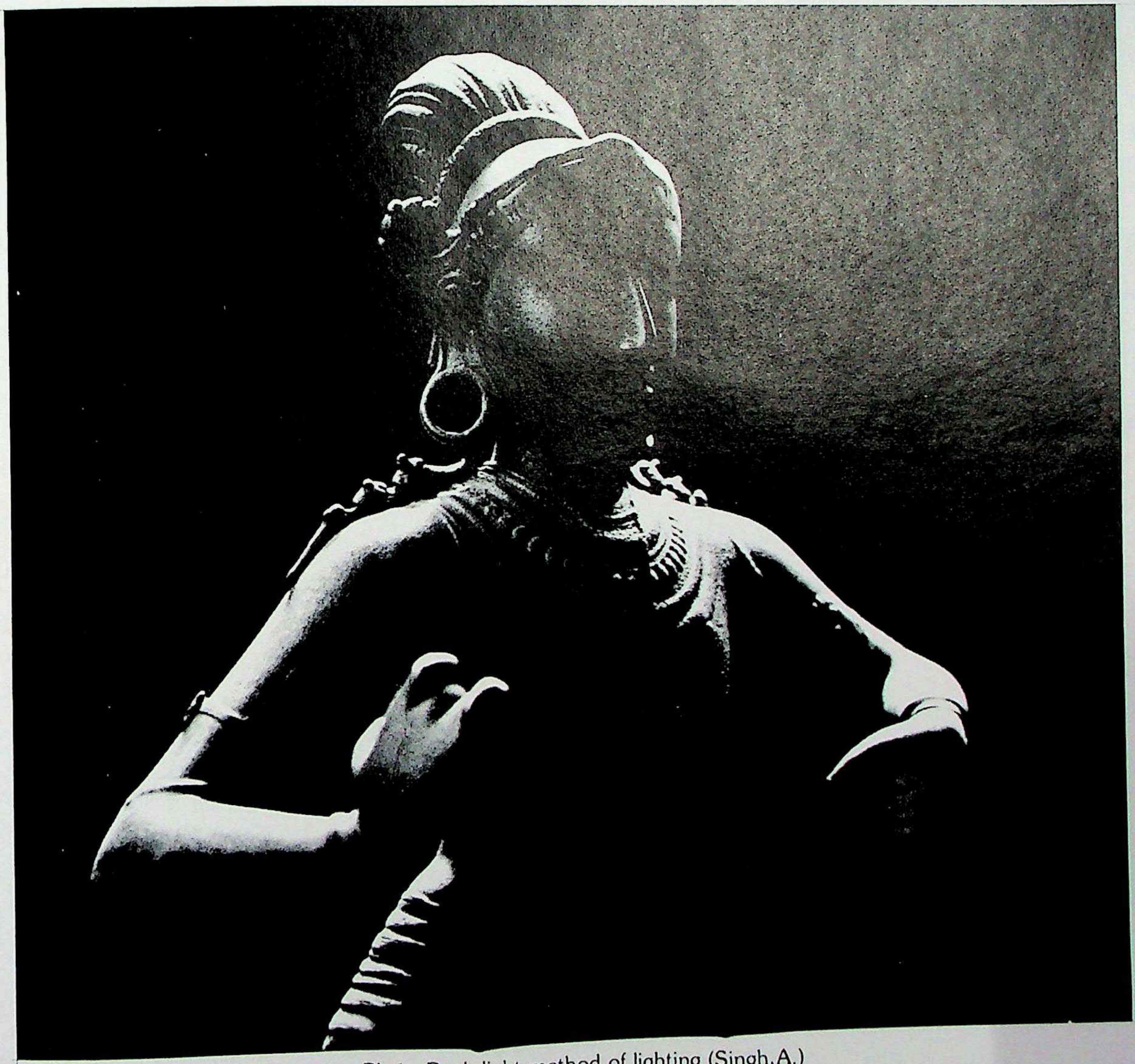
Pl. 9. General view of Jama Masjid. (Narain, H.K.)

Pl. 10. General view of Chhota Imambara.
(Narain, H.K.)



Pl. 11. General view of Imambara Shah Najaf. (Narain, H.K.)

Pl.12. General view of Kazmain Building. (Narain, H.K.)



Pl. 1. Back light method of lighting (Singh, A.)

Pl. 3. Gold and Silver Coins-Axial lighting used (Singh,A.)

Pl. 2. Cone method of lighting used (Singh,A.)

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NOTES FOR CONTRIBUTORS

1. The research papers related to the various fields of Archaeology, History and Culture viz. exploration, excavation, conservation, palaeography, numismatics, art and architecture etc., notes about the new important discoveries and reviews of the research works will be acceptable for this journal.
2. The article may be written in Hindi or English.
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5. The captions of the photographs and line drawings should be mentioned by a soft pencil on the back side of the same. A list of such captions should be enclosed along with the article separately with an indication in the text as to where they, and any tables and schedules are to be placed.

   The upper portion of the photographs should be marked with a vertical line on the back side of the photographs.
6. Photographs should be in black and white on glossy paper in high contrast measuring 16.5 x 21.5 cms.
7. Acknowledgement should be given on a separate sheet and enclosed with the article before references.
8. References should be given in the end of the article on a separate sheet.

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   Gupte, R.S. 1972 Iconography of the Hindus Buddhists and Jains : D.B. Taraporewala Sons and Company Private Limited, 210, Doctor Dada Bhai Nairoji Road, Bombay-1, page 25.

   (b) References to articles in periodicals should include author's name, year of publica tion, title of article (within double inverted comma), title of periodical (underlined), volume, issue number (if required), and page number.

   An example of article reference :

   Chakrabarti, D.K. 1978, "Lapis Lazuli in Early India", Man & Environment, Volume 2, Indian Society for Prehistoric and Quaternary studies, Physical Research Laboratory, Ahmedabad, page nos. 51-58.

   When more than one publication of a single year by the same author are cited, all except the first should be indicated by a small alphabet added to the year, e.g. Chakrabarti, D.K. 1978(a).

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लेखकों के लिए आवश्यक टिप्पणियाँ

1. इस वार्षिक पत्रिका में पुरातत्व, इतिहास एवं संस्कृति से सम्बन्धित सभी विषयों पर यथा– सर्वेक्षण, उत्खनन, अनुरक्षण, पुरालिपि, मुद्राशास्त्र, कला एवं स्थापत्य पर लिखे गये शोध-पत्रों, महत्वपूर्ण नवीन उपलब्धियों से सम्बन्धित टिप्पणियाँ और शोध-ग्रन्थों की समीक्षाओं को स्वीकार किया जायेगा।

2. शोध-पत्र हिन्दी अथवा अंग्रेजी में लिखे जा सकते हैं।

3. शोध-पत्र बायें पार्श्व में पर्याप्त स्थान छोड़कर दोहरे स्पेस में सुस्पष्ट टंकित होने चाहिए।

4. यथासम्भव संक्षेप चिन्हों का प्रयोग न किया जाये। यदि ऐसा करना अत्यावश्यक हो तो लेख के अन्त में सन्दर्भ के बाद उनकी सम्पूर्ण सूची दी जाय।

5. चित्र/रेखाचित्र के शीर्षक हल्की पेंसिल से उनके पीछे अंकित हो। इनके शीर्षक की एक सूची लेख के साथ अलग से संलग्न की जाय।

6. श्वेत–श्याम छायाचित्र अच्छे, कान्ट्रास्ट और पूर्ण आकार (16.5×21.5 से.मी.) के होने चाहिए।

7. आभार प्रदर्शन सम्बन्धी विवरण एक अलग पृष्ठ पर सन्दर्भों के पूर्व संलग्न किये जायें।

8. सन्दर्भों का विवरण लेख के अन्त में अलग पृष्ठ पर संलग्न किये जायें। इसके लिए मानक प्रारूप निम्नवत् है:–

   (क) पुस्तक के सन्दर्भ में लेखक का नाम, प्रकाशन का वर्ष, पुस्तक का नाम (रेखांकित) वाल्यूम, संस्करण, प्रकाशक का नाम-पता और सन्दर्भित पृष्ठ संख्या दिये जायें। उदाहरणार्थ:–

   गुप्ते, आर० एस० 1972 **आइक्नोग्राफी ऑफ दि हिन्दूज बुद्धिस्ट्स एण्ड जैन्स**, प्रथम संस्करण, डी० बी० तारापोरवाला सन्स एण्ड कम्पनी प्राइवेट लिमिटेड, 210, डाक्टर दादा भाई नैरोजी रोड, बम्बई-1, पृष्ठ-25.

   (ख) शोध-पत्रों के सन्दर्भ में लेखक का नाम, प्रकाशन का वर्ष, लेख का शीर्षक (डबल इन्वर्टेड कामा), शोध पत्रिका का नाम (रेखांकित), वाल्यूम, अंक, पृष्ठ संख्या, उदाहरणार्थ:–

   चक्रवर्ती, डी० के० 1978 "लैपिस लेजूली इन अर्ली-इण्डिया" **मैन एण्ड इनवायरनमेन्ट**, वाल्यूम 2, इण्डियन सोसायटी फार प्रिहिस्ट्रॉरिक एण्ड क्वार्टनरी स्टडीज, फिज़िकल रिसर्च लेबोरेटरी, अहमदाबाद, पृष्ठ संख्या 51-58.

   यदि एक ही वर्ष में एक ही लेखक के एक से अधिक सन्दर्भ दिये जाने हों तो, पहली बार के अतिरिक्त निम्नवत् सन्दर्भ दिया जाये। चक्रवर्ती डी० के०, 1978.

   (ग) प्रथम उद्धरण में पूर्ण विवरण दिया जाये। बार-बार एक ही उद्धरण के लिए "पूर्वोक्त" का प्रयोग, लेखक का नाम और शोध पत्र व पुस्तक के प्रकाशन के वर्ष के साथ अंकित किया जाये।

9. लेख, चित्र एवं रेखाचित्र आदि के चयन के विषय में सम्पादक का निर्णय अन्तिम होगा।

10. शोध-पत्र में उल्लिखित मतों के लिए सम्पादक उत्तरदायी न होंगे।

11. लेख प्रकाशित होने पर लेखक को पत्रिका की एक प्रति तथा उनके लेख की पुनर्मुद्रित निःशुल्क 25 प्रतियाँ भेंट की जायेंगी।

12. पत्रिका में प्रकाशित लेख अथवा उसका कोई अंश, चित्र या छायाचित्र पुनः मुद्रित करने के लिए प्रकाशक की पूर्वानुमति लेना आवश्यक होगा।

13. पत्रिका से सम्बन्धित समस्त पत्र-व्यवहार **सम्पादक**, उ० प्र० राज्य पुरातत्व संगठन शोध पत्रिका (जर्नल ऑफ दि यू० पी० आर्कियोलॉजिकल आर्गनाइजेशन) रोशनुद्दौला कोठी, कैसरबाग, लखनऊ के पते पर किये जायें। फोन नं०- 243045 (कार्यालय), 76680 (निवास)